



# Electronic Data Reporting

## Acid Rain Program/ Subpart H

Revised  
June 28, 2000  
Version 2.1

### ***Who needs to use Electronic Data Reporting v2.1 formats?***

The Acid Rain Program and Subpart H of Part 75 require submission of monitoring system certification applications and periodic emissions reports (including monitoring plan updates) in electronic format. Software developers and affected companies will use the revisions to the electronic file record structures in EDR v2.1 to develop computer-generated reports that meet the requirements of 40 CFR Part 75.

### ***When do I need to begin reporting using EDR Version 2.1?***

For the Acid Rain Program, Electronic Data Reporting format (EDR) Version 2.1 replaces EDR Version 1.3 beginning on April 1, 2000.

For facilities subject to Subpart H of Parts 75 and 96, you must report in EDR Version 2.1 beginning:

- May 1, 2000 if the NO<sub>x</sub> Authorized Account Representative intends to apply for early reduction credits; or
- May 1, 2002 for other units operating before January 1, 2002. (See § 96.70(b) for units operating on or after January 1, 2002).

For units subject to Subpart H of Part 75 that are not subject to Part 96, the deadline will be specified by the State for the particular program.

For facilities subject to the OTC NO<sub>x</sub> Budget Program only, owners and operators must meet the requirements of EDR v2.0 (July 3, 1997). The effective date of these requirements are set forth in State regulation. For more information on EDR v2.0 requirements, see ***EDR v2.0 Monitoring Certification and Reporting Instructions***, July 3, 1997.

### ***Which records are needed for which programs?***

The Program Column in Tables 4 through 7 indicates the regulatory programs for which each record type may be applicable. "ARP" indicates Part 75 Acid Rain Program requirements, "OTC NBP" or "OTC" indicates State requirements for the OTC NO<sub>x</sub> Budget Program, and "Subpart H" indicates the applicability of the record to a unit using the NO<sub>x</sub> mass monitoring provisions in Subpart H of Part 75 (e.g., units covered by the SIP Call and NO<sub>x</sub> Model Trading Rule). This designation includes Acid Rain units also subject to Subpart H.

### ***How do I know if a record type has been updated from a previous version of the EDR?***

The Record Type Column in Tables 4 through 7 indicates both the general information required in the record type and additional information about whether the record is new or has been modified from EDR v1.3. The indicators used to describe the status of the record are:

- New: This record type was not in EDR v1.3; it was added either in EDR v2.0 or EDR v2.1.
- Modified: This record type was in EDR v1.3 and was modified in EDR v2.0 (for purposes of the OTC NO<sub>x</sub> Budget Program) and/or EDR v2.1 (to support the revisions to Part 75 and Subpart H).
- Optional: This record type was in EDR v1.3. It is not required for Acid Rain units subject to Part 75. However, if you continue to submit it, EPA will accept it.

If a record type does not include any of these indicators, it has not changed since EDR v1.3.

### ***How is the EDR organized?***

The EDR is divided into seven tables:

Table 1 provides an index listing all the possible record types that may be submitted in an electronic report.

Table 2 provides an index of all record types which were included in EDR v2.0 for the OTC NBP reporting only. The OTC NBP record types are included in Appendix A to this document.

Table 3 identifies all record types that have been replaced or retired since EDR v2.1. The retired or record types are included in Appendix B to this document.

Tables 4 through 7 define the specific computerized layout or "record structures" of the electronic reports, containing the following types of data: Quarterly Emission Data (Table 4), Monitoring Plan Data (Table 5), Certification-QA/QC Test Data (Table 6), and Compliance Certification Data (Table 7).

The record structures define the order, length, and placement of information within the electronic report or "file" (*i.e.*, the Record Type, Type Code, Start Column, Data Element Description, Units, Range, Length, and Fortran (FTN) Format for each data element in the electronic report). This information is used to construct electronic files to submit electronic reports to the U.S. Environmental Protection Agency.

### ***How do I find out more about reporting using the EDR v2.1 formats?***

More detailed information on the selection of record types for reporting and the use of specific columns within a record type for a particular program is included in the ***Revised EDR v2.1 Monitoring Certification and Reporting Instructions***, January, 2000. You can find these instructions on EPA's Acid Rain Program homepage at [www.epa.gov/acidrain](http://www.epa.gov/acidrain).

**TABLE 1: EDR V2.1 ELECTRONIC DATA REPORTING RECORD TYPES**

RECORD TYPES			
GROUP	SUB-GROUP	RECORD TYPE	RECORD
Facility Information (100)	Facility Information	Facility Identification (Modified)	100
		Record Types Submitted (Optional)	101
		Facility Location and Identification Information (New)	102
Monitoring Data (200)	Pollutant Gas Concentrations	SO <sub>2</sub> Concentration Data	200
		NO <sub>x</sub> Concentration Data (Modified)	201
		CO <sub>2</sub> Concentration Data (Modified)	202
	Diluent Gas Concentrations	CO <sub>2</sub> Diluent Concentration Data (Modified)	210
		O <sub>2</sub> Diluent Concentration Data (Modified)	211
	Moisture Data	Moisture Data (New)	212
	Volumetric Flow	Volumetric Flow Data (Modified)	220
	Daily Quality Assurance Data and Results	Daily Calibration Test Data and Results (Modified)	230
		Flow Daily Interference Check Results	231
	Reference Method Backup QA Data	Hourly Pollutant and Diluent Concentration Data from RM Backup Analyzers	260
		Quality Assurance Run Data for Reference Method Analyzers or Systems Used as Backup CEMS	261
		Reference Method Backup Flow Rate Monitor (Run Summary) (Modified)	262
Unit Data (300)	Unit Operating and Cumulative Emissions Data	Unit Operating Parameters (Modified)	300
		Quarterly Cumulative Emissions Data (Modified)	301
		Oil Fuel Flow (Modified)	302
		Gas Fuel Flow (Modified)	303
		Quarterly Heat Input From Long Term Fuel Flow Measurements for Qualifying Low Mass Emission Units (New)	305
		Cumulative NO <sub>x</sub> Mass Emissions Data (New)	307
	SO <sub>2</sub> Mass Emissions Data	SO <sub>2</sub> Mass Emissions Data (Modified)	310
		SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Oil (Modified)	313
		SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Natural Gas (Modified)	314
	NO <sub>x</sub> Emissions Data	NO <sub>x</sub> Emission Rate Data	320
		NO <sub>x</sub> Emission Rate Alternative Estimation Parameters for Oil and Gas (Modified)	323
		NO <sub>x</sub> Emission Rate Estimation Based on Appendix E (New)	324
		NO <sub>x</sub> Emission Rate Estimation Based on Appendix E for Multiple Fuel Hours (New)	325
		NO <sub>x</sub> Mass Emissions (New)	328

**TABLE 1: EDR V2.1 ELECTRONIC DATA REPORTING RECORD TYPES**

<b>RECORD TYPES</b>			
<b>GROUP</b>	<b>SUB-GROUP</b>	<b>RECORD TYPE</b>	<b>RECORD</b>
Unit Data (300)	CO <sub>2</sub> Mass Emissions Data	CO <sub>2</sub> Mass Emissions Data (Modified)	330
		CO <sub>2</sub> Mass Emissions Estimation Parameters	331
	Qualifying Low Mass Emissions Unit Data	Hourly Emissions Data for Qualifying Low Mass Emissions Units (New)	360
Monitoring Plan Information (500)		Stack/Pipe Header Definition Table (Modified)	503
		Unit Information (New)	504
		Program Indicator for Report (New)	505
		EIA Cross Reference Information (New)	506
		Fuel Usage Data to Qualify as a Peaking Unit or an Acid Rain Program Gas-fired Unit (New)	507
		Subpart H Reporting Frequency Change (New)	508
		Monitoring Systems/Analytical Components Table (Modified)	510
		Formula Table	520
		Span Table (Modified)	530
		Maximums, Minimums, Defaults and Constants (New)	531
		Unit and Stack Operating Load Data (New)	535
		Range of Operation, Normal Load, and Load Usage (New)	536
		Fuel Flowmeter Data (Modified)	540
		Reasons for Monitoring System Downtime or Missing Parameter (Optional)	550
		Monitoring System Recertification, Maintenance, or Other Events (New)	556
		Appendix E NO <sub>x</sub> Correlation Curve Segments (New)	560
		Monitoring Methodology Information (New)	585
		Control Equipment Information (New)	586
		Unit Fuel Type (New)	587
Certification Test Data (600)	Calibration/Error Tests	7-Day Calibration Error Test Data and Results (Modified)	600
	Linearity Checks	Linearity Check Data (Modified)	601
		Linearity Check Results (Modified)	602
	Leak Checks	Flow Leak Check Results (Modified)	603
	Flow/Load Checks	Reference Data for Flow-to-Load Ratio or Gross Heat Rate Evaluation (New)	605
		Quarterly Flow-to-Load Ratio or Gross Heat Rate Check (New)	606

**TABLE 1: EDR V2.1 ELECTRONIC DATA REPORTING RECORD TYPES**

RECORD TYPES			
GROUP	SUB-GROUP	RECORD TYPE	RECORD
Certification Test Data (600)	RATA/Bias Tests	RATA and Bias Test Data (Modified)	610
		RATA and Bias Test Results (Modified)	611
		Reference Method Supporting Data for Flow RATA Tests (New)	614
		Reference Method Supporting Data for Flow RATA Tests (New)	615
		Reference Method Supporting Data for Flow RATA Tests (New)	616
	Cycle Time Test	Cycle Time Test Data and Results (Modified)	621
	On Line/Off Line Calibration Demonstration	Qualifying Test for Off-line Calibration Error Tests (New)	623
	Miscellaneous QA Test/Activity	Other QA Activities (New)	624
	Fuel Flowmeter Accuracy Tests	Fuel Flowmeter Accuracy Test (New)	627
		Accuracy Test for Orifice, Nozzle, or Venturi Type Fuel Flowmeters (New)	628
	Quarterly Fuel Flow-to-Load Analysis	Baseline Data for Fuel-Flow-to-Load Ratio or Gross Heat Rate Check for Fuel Flowmeters (New)	629
		Quarterly Fuel-Flow-to-Load Test for Fuel Flowmeters (New)	630
	Alternative Monitoring Petition Data	Alternative Monitoring System Approval Petition Data (Renumbered from EDR v1.3 RT 630)	640
		Alternative Monitoring System Approval Petition Results and Statistics (Renumbered from EDR v1.3 RT 631)	641
	LME Certification	Qualifying Data for Low Mass Emissions Units Excepted Methodology (New)	645
	Appendix E and Unit Specific Default Emission Rate Test Data	NO <sub>x</sub> Emission Rate Correlation Test Data (Modified)	650
		NO <sub>x</sub> Emission Rate Correlation Results (Modified)	651
		Heat Input from Oil Combusted During Test (Modified)	652
		Heat Input from Gas Combusted During Test (Modified)	653
		Unit Group Testing (New)	660
	QA Test Extensions/Exemption Claims	Single-load Flow RATA Claim (New)	695
		Fuel Flowmeter Accuracy Test Extension (New)	696
		RATA Deadline Extension or Exemption (New)	697
		Quarterly QA Test Exemption Claim (New)	698
		QA Test Extension Claim Based on Grace Period (New)	699

**TABLE 1: EDR V2.1 ELECTRONIC DATA REPORTING RECORD TYPES**

RECORD TYPES			
GROUP	SUB-GROUP	RECORD TYPE	RECORD
Certification Data (900)	Certification Data	Part 75 Certification Statement and Designated Representative Signature	900
		Part 72 Certification Statement	901
		Cover Letter Text (file specific) (Optional)	910
		Cover Letter Text (not specific to file) (Optional)	920
		Subpart H Certification Statement and NO <sub>x</sub> Authorized Account Representative Signature (New)	940
		Subpart H General Certification Statement (New)	941
		Contact Person Record (New) (Optional)	999

**TABLE 2: OTC/NBP ONLY RECORD TYPES (EDR v2.0)**

<b>RECORD TYPES</b>			
<b>GROUP</b>	<b>SUB-GROUP</b>	<b>RECORD TYPE</b>	<b>RECORD</b>
Monitoring Data (200)		Daily QA Reference Checks for Non-CEMS Parameters	232
		Other Daily QA Checks	233
Unit Data (300)		Long Term Fuel Flow Measurements	306
		Hourly Heat Input Data for Alternative Heat Input Methods	350
		Supplementary Heat Input Data for Solid Fuel Measurements	351
		Supplementary Heat Input Data for Other Methodologies	352
Monitoring Plan Information (500)		Monitoring System Recertification Events	555
Certification Test Data (600)		Fuel Flowmeter Calibration Data	625
		Fuel Flowmeter Calibration Results	626
		Identical Unit Group Test Results for Appendix E	661
Certification Data (900)		NO <sub>x</sub> Budget Program Certification Statement and Authorized Account Representative Signature	930
		NO <sub>x</sub> Budget Program General Certification Statement	931

**TABLE 3: RESERVED/EXPIRED/REPLACED RECORD TYPES**

RECORD TYPES			
GROUP	SUB-GROUP	RECORD TYPE	RECORD
Unit Data (300)	SO <sub>2</sub> Mass Emissions Data	SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Oil (Replaced by RT 313)	311
		SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Natural Gas (Replaced by RT 314)	312
	NO <sub>x</sub> Emissions Data	NO <sub>x</sub> Emission Rate Alternative Estimation Parameters for Oil (Replaced by RT 323)	321
		NO <sub>x</sub> Emission Rate Alternative Estimation Parameters for Natural Gas (Replaced by RT 323)	322
Unit Data (400)	SO <sub>2</sub> Control Equipment Data	SO <sub>2</sub> Control Equipment Operation Parameters	400
		SO <sub>2</sub> Control Equipment Scrubber Module Parameters	401
	NO <sub>x</sub> Control Equipment Parameters	NO <sub>x</sub> Control Equipment Operation Parameters	410
	Qualifying Phase I SO <sub>2</sub> Control Equipment Parameters	SO <sub>2</sub> Phase I Technology Post-Combustion Control Parameters Inlet Monitors	420
		SO <sub>2</sub> Phase I Technology Post-Combustion Control Parameters Outlet Monitors	421
		SO <sub>2</sub> Phase I Technology Pre-Combustion Control Parameters	422
		SO <sub>2</sub> Phase I Technology Combustion Emission Controls	423
Monitoring Plan Information (500)		Unit Definition Table (Replaced by RT 502, January 1, 1996)	500
		Stack/Pipe Header Definitions Table (Replaced by RT 503)	501
		Unit Definition Table §75.53(c)(2) (Replaced by RTs 504, 505, 585, 586, and 587)	502
		Monitoring System Certification Status/Events (Withdrawn by Question C5 in the Consolidated Questions and Answers on OTC NO <sub>x</sub> Budget Program Monitoring and Reporting, June 2, 1998.)	511
Certification Test Data and Results (600)	RATA/Bias Tests	Reference Method Supporting Data for Gas RATAs (Replaced by RTs 614, 615, and 616)	612
		Reference Method 2 Supporting Data for Flow RATA Tests (Replaced by RTs 614, 615, and 616)	613
	Cycle/Response Time	Cycle Time/Response Time Test Data and Results (Replaced by RT 621)	620
	Alternative Monitoring System Petitions Test Data and Results	Alternative Monitoring System Approval Petition Date (see RT 640 and 641)	630
		Alternative Monitoring System Approval Petition Results and Statistics (See RT 640 and 641)	631



**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

FACILITY INFORMATION								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
FACILITY INFORMATION								
Facility Identification  (Modified)	100	1	Record type code				3	I3
		4	Facility/ORISPL number				6	I6
		10	Calendar quarter data contained in report			1-4	1	I1
		11	Calendar year data contained in report		YYYY	≥ 1993	4	I4
		15	EDR version (V2.0, V2.1) <sup>1</sup>				5	A5
Total Record Length							19	
Record Types Submitted  (Optional)	101	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Stack/Pipe ID				6	A6
		16	Parameter reported <sup>2</sup>				7	A7
		23	Record type used				3	I3
		26	Number of records			1-9999	4	I4
Total Record Length							29	
Facility Location and Identification Information  (New)	102	1	Record type code				3	I3
		4	Plant name				20	A20
		24	EPA facility ID (FINDS)				12	A12
		36	EPA AIRS facility system (AFS) ID				10	A10
		46	State facility ID				15	A15
		61	Source category/type				20	A20
		81	Primary SIC code				4	I4
		85	State postal abbreviation				2	A2
		87	County code (FIPS)				3	I3
		90	Reserved				1	
		91	Latitude		DDMMSS		6	I6
		97	Longitude		DDDMMSS		7	I7
		Total Record Length						

<sup>1</sup> EDR version 1.3B expires on 3/31/1999 and EDR version 1.3 expires on 3/31/2000.

<sup>2</sup> Available codes are: CO2CONC, CO2MASS, DILUENT, FLOWRTE, GASRATE, HEATINP, LOWMASS, MOISTUR, NOXCONC, NOXMASS, NOXRATE, OILRATE, OPERATN, OSNSUMM, QTRSUMM, SO2CONC, SO2MASS

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

MONITORING DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
POLLUTANT GAS CONCENTRATIONS								
SO <sub>2</sub> Concentration Data  ARP only	200	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Percent monitor data availability for SO <sub>2</sub>		%	0.0-100.0	5	F5.1
		29	Average SO <sub>2</sub> concentration for the hour		ppm		6	F6.1
		35	Average SO <sub>2</sub> concentration for the hour adjusted for bias		ppm		6	F6.1
		41	Method of determination code			01-10,12,16,17,19,20,21,54,55	2	I2
Total Record Length							42	
NO <sub>x</sub> Concentration Data  (Modified)	201	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average NO <sub>x</sub> concentration for the hour		ppm		6	F6.1
		30	Method of determination code <sup>3</sup>			01-04,06-12,17,19,20,21,54,55	2	I2
		32	Adjusted average NO <sub>x</sub> concentration for the hour		ppm		6	F6.1
		38	Percent monitor data availability for NO <sub>x</sub> concentration		%	0.0-100.0	5	F5.1
Total Record Length							42	
CO <sub>2</sub> Concentration Data  (Modified)  ARP Only	202	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average CO <sub>2</sub> concentration for the hour		%		6	F6.1
		30	Method of determination code			01-04,06-10,12,17,20,54,55	2	I2
		32	Percent monitor data availability for CO <sub>2</sub> concentration		%	0.0-100.0	5	F5.1
		Total Record Length						

<sup>3</sup> MODCs 30, 31, 35, and 36 were used in EDR v2.0 for OTC sources. These codes are not allowed for EDR v2.1.

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

MONITORING DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
DILUENT GAS CONCENTRATIONS								
CO <sub>2</sub> Diluent Concentration Data (Modified)	210	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average CO <sub>2</sub> concentration for the hour		%	0.0-100.0	5	F5.1
		29	Method of determination code <sup>4</sup>			01-04, 06-10, 12,17,20, 54,55	2	I2
		31	Percent monitor data availability for CO <sub>2</sub> concentration		%	0.0-100.0	5	F5.1
Total Record Length							35	
O <sub>2</sub> Diluent Concentration Data (Modified)	211	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average O <sub>2</sub> concentration for the hour		%	0.0-100.0	5	F5.1
		29	Method of determination code <sup>4</sup>			01-04, 06-10, 12,17,20, 54,55	2	I2
		31	Moisture basis of measurement (W-wet or D-dry (for O <sub>2</sub> used for moisture calculations), Blank (for O <sub>2</sub> used only for diluent purposes))			W,D	1	A1
32	Percent monitor data availability for O <sub>2</sub> concentration		%	0.0-100.0	5	F5.1		
Total Record Length							36	
MOISTURE DATA								
Moisture Data (New)	212	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Average moisture content of flue gases for the hour		%H2O	0.0-100.0	5	F5.1
		29	Formula ID				3	A3
		32	Method of determination code <sup>5</sup>			01-04, 06-10, 12,21,54, 55	2	I2
34	Percent monitor data availability for moisture		%	0.0-100.0	5	F5.1		
Total Record Length							38	

<sup>4</sup> MODC 30 was used in EDR v2.0 for OTC sources. This code is not allowed for EDR v2.1.

<sup>5</sup> MODCs 30 and 31 were used in EDR v2.0 for OTC sources. These codes are not allowed for EDR v2.1.

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

MONITORING DATA										
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)		
VOLUMETRIC FLOW										
Volumetric Flow Data  (Modified)	220	1	Record type code				3	I3		
		4	Unit/Stack ID				6	A6		
		10	Component ID				3	A3		
		13	Monitoring system ID				3	A3		
		16	Date				YYMMDD	6	I6	
		22	Hour				HH	00-23	2	I2
		24	Percent monitor data availability for volumetric flow				%	0.0-100.0	5	F5.1
		29	Average volumetric flow rate for the hour				scfh		10	I10
		39	Average volumetric flow rate for the hour adjusted for bias				scfh		10	I10
		49	Reserved						5	
		54	Operating load range corresponding to gross load					01-20	2	I2
		56	Method of determination code <sup>5</sup>					01-12,20,54,55	2	I2
Total Record Length							57			
DAILY QUALITY ASSURANCE DATA AND RESULTS										
Daily Calibration Test Data and Results  (Modified)	230	1	Record type code				3	I3		
		4	Unit/Stack ID				6	A6		
		10	Component ID				3	A3		
		13	Monitoring system ID				3	A3		
		16	Date				YYMMDD	6	I6	
		22	Hour				HH	00-23	2	I2
		24	Instrument span <sup>6</sup>						13	F13.3
		37	Reference value <sup>6</sup>						13	F13.3
		50	Measured value <sup>6</sup>						13	F13.3
		63	Results (calibration error or  R-A )				%,ppm	0.0-100.0	5	F5.1
		68	Alternative performance specification (APS) flag <sup>7</sup>					0,1	1	I1
		69	Reserved						2	
		71	Calibration gas or reference signal level (Z-zero, M-mid, H-high)					Z,M,H	1	A1
		72	Span scale (H-high, L-low)					H,L	1	A1
Total Record Length							72			
Flow Daily Interference Check Results	231	1	Record type code				3	I3		
		4	Unit/Stack ID				6	A6		
		10	Component ID				3	A3		
		13	Monitoring system ID				3	A3		
		16	Date				YYMMDD	6	I6	
		22	Hour				HH	00-23	2	I2
		24	Status (P-pass, F-fail)					P,F	1	A1
		25	Reserved						2	
Total Record Length							26			

<sup>6</sup> Report span, reference values, and measured values in calibration span units defined in RT 530, column 62.

<sup>7</sup> If an alternative performance specification (|R-A|) is used for SO<sub>2</sub> or NO<sub>x</sub> low emitters or for low-span DP-type flow monitors, according to section 3 of Appendix A to Part 75, a 1 is reported; a zero is reported otherwise. For CO<sub>2</sub> or O<sub>2</sub> |R-A| is the normal calculation method; therefore, a 0 (zero) should always be reported for CO<sub>2</sub> and O<sub>2</sub> and there is no alternative specification.

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

MONITORING DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
REFERENCE METHOD BACKUP QA DATA								
Hourly Pollutant and Diluent Concentration Data from RM Backup Analyzers	260	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Reference method component ID				3	A3
		13	Reference method monitoring system ID				3	A3
		16	Parameter monitored (SO2, NOX, CO2, O2)				4	A4
		20	Run number				2	I2
		22	Date		YYMMDD		6	I6
		28	Hour		HH	00-23	2	I2
		30	Unadjusted (raw) average pollutant or diluent concentration for the hour		%, ppm		7	F7.2
37	Adjusted average pollutant or diluent concentration for the hour		%, ppm		7	F7.2		
Total Record Length							43	

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

MONITORING DATA									
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)	
REFERENCE METHOD BACKUP QA DATA									
Quality Assurance Run Data for Reference Method Analyzers or Systems Used as Backup CEMS	261	1	Record type code				3	I3	
		4	Unit/Stack ID				6	A6	
		10	Reference method component ID				3	A3	
		13	Reference method monitoring system ID				3	A3	
		16	Run number				2	I2	
		18	RM run start date		YYMMDD		6	I6	
		24	RM run start hour		HH	00-23	2	I2	
		26	RM run end date		YYMMDD		6	I6	
		32	Rm run end hour		HH	00-23	2	I2	
		34	Type of analyzer/system			EXT, DIL	3	A3	
		37	Moisture basis of RM analysis			WET, DRY	3	A3	
		40	Instrument span (as defined in App A, Part 60)				5	I5	
		45	Dilution factor				5	I5	
		50	Reference zero gas concentration				7	F7.2	
		57	Initial (pre-test) calibration response--zero gas				7	F7.2	
		64	Pre-test calibration error--zero gas (% of span)			%	5	F5.1	
		69	Reference mid-level gas concentration				7	F7.2	
		76	Initial (pre-test) calibration response--mid gas				7	F7.2	
		83	Pre-test calibration error--mid gas (% of span)			%	5	F5.1	
		88	Reference high-level gas concentration				7	F7.2	
		95	Initial (pre-test) calibration response--high gas				7	F7.2	
		102	Pre-test calibration error--high gas (% of span)			%	5	F5.1	
		107	Upscale gas used during run (M-mid, H-high)				M,H	1	A1
		108	Pre-run system response--zero gas					7	F7.2
		115	Pre-run system bias (non-dilution) or calibration error (dilution)--zero gas (% of span)			%		5	F5.1
		120	Post-run system response--zero gas					7	F7.2
		127	Post-run system bias (non-dilution) or calibration error (dilution)--zero gas (% of span)			%		5	F5.1
		132	Pre-run system response--upscale gas					7	F7.2
		139	Pre-run system bias (non-dilution) or calibration error (dilution)--upscale gas (% of span)			%		5	F5.1
		144	Post-run system response--upscale gas					7	F7.2
151	Post-run system bias (non-dilution) or calibration error (dilution)--upscale gas (% of span)			%		5	F5.1		
156	Zero drift (% of span)			%		5	F5.1		
161	Calibration drift (% of span)			%		5	F5.1		
166	Stack gas density adjustment factor					5	F5.3		
Total Record Length							170		

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

MONITORING DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
REFERENCE METHOD BACKUP QA DATA								
Reference Method Backup Flow Rate Monitor (Run Summary) (Modified)	262	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Reference method component ID				3	A3
		13	Reference method monitoring system ID				3	A3
		16	Run date		YYMMDD		6	I6
		22	Run hour		HH	00-23	2	I2
		24	Number of traverse points				2	I2
		26	(Square root of ΔP) <sub>avg.</sub>		in. H <sub>2</sub> O		5	F5.2
		31	T <sub>s</sub> , stack temperature		°F		4	I4
		35	P <sub>bar</sub> , barometric pressure, in. Hg		in. Hg		5	F5.2
		40	P <sub>g</sub> , stack static pressure, in. H <sub>2</sub> O		in. H <sub>2</sub> O		5	F5.2
		45	% CO <sub>2</sub> in stack gas, dry basis		%		5	F5.2
		50	% O <sub>2</sub> in stack gas, dry basis		%		5	F5.2
		55	% moisture in stack gas		% H <sub>2</sub> O		5	F5.2
		60	M <sub>d</sub> , stack gas molecular weight, dry basis		lbs/lbs-mole		5	F5.2
		65	M <sub>s</sub> , stack gas molecular weight, wet basis		lbs/lbs-mole		5	F5.2
		70	Pitot tube or probe coefficient				5	F5.3
		75	Date of latest pitot tube or probe calibration		YYMMDD		6	I6
		81	A <sub>s</sub> , stack or duct cross-sectional area at test port		ft <sup>2</sup>		6	F6.1
		87	Total volumetric flow rate		scfh		10	I10
97	Average axial velocity		ft/sec		8	F8.3		
105	Reference method probe type				3	A3		
Total Record Length							107	

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA										
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)		
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA										
Unit Operating Parameters  (Modified)	300	1	Record type code				3	I3		
		4	Unit/Stack/Pipe ID				6	A6		
		10	Date				6	I6		
		16	Hour				HH	00-23	2	I2
		18	Unit operating time					0.00-1.00	4	F4.2
		22	Gross unit load during unit operation				MWe		6	I6
		28	Steam load during unit operation				1000 lb/hr		6	I6
		34	Operating load range corresponding to gross load during unit operation					01-20	2	I2
		36	Hourly heat input rate during unit operation for all fuels				mmBtu/hr		7	F7.1
		43	Heat input formula ID						3	A3
		46	F-factor for heat input calculation				CEMS Only		10	F10.1
		56	Use of diluent cap for heat input calculation for this hour (Y-cap used)				CEMS Only	Y	1	A1
		57	Total heat input for the hour				Optional	mmBtu	7	F7.1
		Total Record Length							63	
Quarterly Cumulative Emissions Data  (Modified)  ARP Only	301	1	Record type code				3	I3		
		4	Unit/Stack/Pipe ID				6	A6		
		10	Date of report generation				6	I6		
		16	Quarterly SO <sub>2</sub> tons emitted				ton	10	F10.1	
		26	Cumulative annual SO <sub>2</sub> tons emitted				ton	10	F10.1	
		36	Quarterly average NO <sub>x</sub> emission rate				lb/mmBtu	13	F13.3	
		49	Cumulative annual average NO <sub>x</sub> emission rate				lb/mmBtu	13	F13.3	
		62	Quarterly CO <sub>2</sub> tons emitted				ton	10	F10.1	
		72	Cumulative annual CO <sub>2</sub> tons emitted				ton	10	F10.1	
		82	Quarterly total heat input				mmBtu	10	I10	
		92	Cumulative annual total heat input				mmBtu	10	I10	
		102	Reserved					6		
		108	Reserved					6		
		114	Quarterly unit/stack/pipe operating hours				hr	4	I4	
		118	Cumulative annual unit/stack/pipe operating hours				hr	4	I4	
Total Record Length							121			



**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Oil Fuel Flow  (Modified)	302	1	Record type code	OTC only	YYMMDD  HH  lb/hr        mmBtu/hr	00-23     0,1  0.01-1.00     0,1,3-7   0,1  M,S	3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date				6	I6
		19	Hour				2	I2
		21	Mass flow rate of oil during oil combustion				10	F10.1
		31	Source of data code for mass oil flow rate <sup>8</sup>				1	I1
		32	Operating load range corresponding to gross load				2	I2
		34	Gross calorific value (GCV) of oil				10	F10.1
		44	Source of data code for GCV of oil <sup>9</sup>				1	I1
		45	Heat input rate from oil during oil combustion				7	F7.1
		52	Fuel usage time				4	F4.2
		56	Type of oil <sup>10</sup>				3	A3
		59	Volumetric flow rate of oil during oil combustion				10	F10.1
		69	Units of measure for volumetric oil flow rate <sup>11</sup>	5	A5			
		74	Source of data code for volumetric oil flow rate <sup>8</sup>	1	I1			
		75	Density of oil	8	F8.5			
		83	Units of measure for density of oil <sup>11</sup>	5	A5			
		88	Source of data code for density of oil <sup>12</sup>	1	I1			
		89	Flag to indicate multiple or single fuel types combusted (M-multiple, S-single)	1	A1			
		90	Type of oil sampling and GCV value used in calculations <sup>12</sup>	2	I2			
		92	Type of oil sampling and density value used in calculations <sup>12</sup>	2	I2			
Total Record Length							93	

- <sup>8</sup>
- 0 = Measured data
  - 1 = Substitute data using load-based procedures
  - 2 = Mass from volumetric measurement
  - 3 = Maximum fuel flow rate (Missing data purposes only. This value should also be used for OTC NBP units using long term fuel flow missing data procedures.)
  - 4 = Emergency fuel (maximum unit fuel flow rate)
  - 5 = Ignitor oil from tank measurements
  - 6 = Uncertified OFFM to measure ignitor oil
  - 7 = Prorated long-term volumetric fuel measurement (OTC NBP only)
  - 8 = Prorated long-term mass fuel measurement (OTC NBP only)

- <sup>9</sup>
- 0 = Measured
  - 1 = Missing data substitution

- <sup>10</sup> See instructions for allowable codes.

- <sup>11</sup> Limited to a Table of Codes: VOLUMETRIC OIL FLOW: SCFH (scf/hr); GALHR (gal/hr); BBLHR (barrels/hr), M3HR (m<sup>3</sup>/hr)  
 DENSITY: LBSCF (lb/scf); LBGAL (lb/gal); LBBBL (lb/barrel), LBM3 (lb/m<sup>3</sup>)  
 GCV: BTUSCF; BTUGAL; BTUBBL; BTUM3 (OTC NBP or Subpart H only); BTULB

- <sup>12</sup> Type of oil sampling and value used:
- 0 = Actual measured value from daily manual sample
  - 1 = Actual measured value from flow proportional/weekly composite sample
  - 2 = Actual measured value from oil tank sample
  - 4 = Highest sampled value in previous calendar year from oil tank sampling
  - 5 = Highest sampled value in previous calendar year from as delivered sample
  - 6 = Maximum value allowed by contract (only if higher than measured oil tank sample)
  - 7 = Maximum value allowed by contract (only if higher than measured oil as delivered sample)
  - 8 = Missing data (maximum potential value from Table D-6)
  - 9 = LME GCV/Density Default
  - 10 = Highest sampled value in previous 30 days

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Gas Fuel Flow  (Modified)	303	1	Record type code	OTC only	YYMMDD	00-23	3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date				6	I6
		19	Hour				2	I2
		21	Flow rate of gas during gas combustion		100 scfh	10	F10.1	
		31	Source of data code for gas flow rate <sup>13</sup>		0,1,3,7,9	1	I1	
		32	Operating load range corresponding to gross load			01-20	2	I2
		34	Gross calorific value (GCV) of gas		Btu/100 scf	10	F10.1	
		44	Source of data code for GCV <sup>9</sup>		0,1	1	I1	
		45	Heat input rate from gas during gas combustion		mmBtu/hr	7	F7.1	
		52	Fuel usage time		0.01-1.00	4	F4.2	
		56	Type of gas <sup>10</sup>			3	A3	
		59	Flag to indicate multiple or single fuel types combusted (M-multiple, S-single fuel)		M,S	1	A1	
		60	Type of gas sampling and GCV value used in calculations <sup>14</sup>		0-10	2	I2	
Total Record Length							61	
Quarterly Heat Input From Long Term Fuel Flow Measurements for Qualifying Low Mass Emission Units  (New)	305	1	Record type code			1-4, 2A,2S	3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Type of fuel <sup>10</sup>				3	A3
		16	Quarter or reporting period				2	A2
		18	Year		YYYY	4	I4	
		22	Quarterly or reporting period fuel flow		10	I10		
		32	Units of measure for fuel flow <sup>15</sup>		5	A5		
		37	Gross calorific value		10	F10.1		
		47	Gross calorific value units of measure <sup>16</sup>		8	A8		
		55	Total heat input		mmBtu	10	I10	
Total Record Length							64	

- <sup>13</sup> 0 = Hourly measurement  
1 = Substitute data using load based procedures  
3 = Maximum fuel flow rate (OTC NBP only long term fuel flow missing data procedures)  
7 = Prorated long term fuel measurement (OTC NBP only)  
9 = Value reported but not used for hourly heat input (OTC NBP only)

- <sup>14</sup> Type of gas sampling and value:  
0 = Actual measured GCV from most recent monthly sampling  
1 = Highest of all sampled values in previous calendar year  
2 = Maximum Value allowed by contract (if higher than monthly sample)  
3 = Highest GCV in previous 30 daily samples  
4 = Actual measured GCV from continuous (hourly) sampling  
5 = Gas fuel in lots, as delivered sampling: highest of all sampled values in previous calendar year  
6 = Gas fuel in lots, as delivered sampling: maximum value allowed by contract (if higher than most recent as delivered sample)  
7 = Actual measured GCV from daily sampling  
8 = Missing data based on Table D-6 default  
9 = LME/GCV Default  
10 = Actual GCV from most recent shipment or lot

- <sup>15</sup> Limited to a table of codes: LB, SCF, GAL

- <sup>16</sup> Limited to a table of codes: BTU/LB, BTU/SCF, BTU/GAL

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
UNIT OPERATING AND CUMULATIVE EMISSIONS DATA								
Cumulative NO <sub>x</sub> Mass Emissions Data  (New)  <b>ARP LME and Subpart H Only</b>	307	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date of report generation				8	I8
		18	Reporting period NO <sub>x</sub> tons emitted				10	F10.1
		28	Cumulative ozone season NO <sub>x</sub> tons emitted				10	F10.1
		38	Reporting period heat input				10	F10.1
		48	Cumulative ozone season heat input				10	F10.1
		58	Total reporting period operating hours				4	I4
		62	Cumulative ozone season operating hours				5	I5
		67	Cumulative annual NO <sub>x</sub> tons emitted				10	F10.1
		77	Cumulative annual total heat input				10	I10
		87	Cumulative annual unit/stack/pipe operating hours				4	I4
Total Record Length							90	
SO2 MASS EMISSIONS DATA								
SO <sub>2</sub> Mass Emissions Data  (Modified)  <b>ARP Only</b>	310	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Date				6	I6
		16	Hour				2	I2
		18	SO <sub>2</sub> mass emission rate for the hour				7	F7.1
		25	SO <sub>2</sub> mass emission rate during unit operation based on adjusted values				7	F7.1
		32	Formula ID from monitoring plan for hourly SO <sub>2</sub> emissions				3	A3
		35	Total SO <sub>2</sub> mass emissions for the hour				7	F7.1
Total Record Length							41	

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
<b>SO2 MASS EMISSIONS DATA</b>								
SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Oil  (Modified)  <b>ARP Only</b>	313	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
		21	Sulfur content of oil sample used to calculate SO <sub>2</sub> mass emission rate		%	.01-5.0	5	F5.2
		26	Reserved				3	
		29	Reserved				1	
		30	SO <sub>2</sub> mass emission rate from oil during oil combustion		lb/hr		7	F7.1
		37	Total SO <sub>2</sub> mass emissions from oil	Optional	lb		7	F7.1
		44	Type of sulfur sampling and value used in calculations <sup>17</sup>			0-8	2	I2
Total Record Length							45	
SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Gas  (Modified)  <b>ARP Only</b>	314	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date		YYMMDD		6	I6
		19	Hour		HH	00-23	2	I2
		21	Sulfur content of gas sample used to calculate SO <sub>2</sub> mass emission rate		grains/100 scf		8	F8.1
		29	Reserved				1	
		30	Default SO <sub>2</sub> emission rate		lb/mmBtu		7	F7.5
		37	SO <sub>2</sub> mass emission rate from gas during gas combustion		lb/hr		8	F8.5
		45	Total SO <sub>2</sub> mass emissions from gas	Optional	lb		7	F7.1
		52	Type of sulfur sampling and value used in calculations <sup>17</sup>			0,3,5, 7-10	2	I2
Total Record Length							53	

<sup>17</sup>

Type of data for sulfur content:

0 = Actual measured hourly average sample from GCH

1 = Actual measured value from oil composite sample

2 = Actual measured value from oil tank sample

3 = Highest daily sample in 30 daily samples (gas or oil)

4 = Highest sampled value in previous calendar year from oil tank sampling

5 = Highest sampled value in previous calendar year from a delivered sample (gas or oil)

6 = Maximum value allowed by contract (only if higher than measured oil tank sample)

7 = Maximum value allowed by contract (only if higher than measured gas or oil as delivered sample)

8 = Missing Data (maximum potential value from Table D-6 for oil or gas)

9 = Actual measured value from daily sample

10 = Actual measured value from most recent shipment or lot (gas)

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
NO <sub>x</sub> EMISSIONS DATA								
NO <sub>x</sub> Emission Rate Data	320	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date				6	I6
		19	Hour				2	I2
		21	Percent monitor data availability for NO <sub>x</sub> emission rate calculations				5	F5.1
		26	F-factor converting NO <sub>x</sub> concentrations to emission rates				10	F10.1
		36	Average NO <sub>x</sub> emission rate for the hour				6	F6.3
		42	Adjusted average NO <sub>x</sub> emission rate for the hour				6	F6.3
		48	Operating load range corresponding to gross load for the hour				2	I2
		50	Formula ID from monitoring plan for hourly NO <sub>x</sub> emission rate				3	A3
		53	Method of determination code <sup>5</sup>				2	I2
Total Record Length							54	
NO <sub>x</sub> Emission Rate Alternative Estimation Parameters for Oil and Gas (Modified)	323	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date				6	I6
		19	Hour				2	I2
		21	Parameters status flag (Y-in spec, N-out of spec, X-parameters data missing or invalid, W-operation above highest tested heat input point, Z-operation below lowest tested heat input point)				1	A1
		22	Average NO <sub>x</sub> emission rate for the hour				6	F6.3
		28	Reserved				6	
		34	Reserved				6	
40	Segment ID of correlation curve	3	A3					
Total Record Length							42	

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
NO <sub>x</sub> EMISSIONS DATA								
NO <sub>x</sub> Emission Rate Estimation Based on Appendix E (New)	324	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	NO <sub>x</sub> monitoring system ID				3	A3
		13	Fuel flow monitoring system ID				3	A3
		16	Date				6	I6
		22	Hour				2	I2
		24	Parameters status flag (Y-in spec, N-out of spec, X-parameters data missing or invalid, W-operation above highest tested heat input point, Z-operation below lowest tested heat input point)				1	A1
		25	Average NO <sub>x</sub> emission rate for the hour for fuel type				6	F6.3
		31	NO <sub>x</sub> mass emission rate for the hour for fuel type				11	F11.2
		42	Segment ID of correlation curve				3	A3
45	Flag to indicate multiple or single fuel types combusted (M-multiple, S-single)	1	A1					
Total Record Length							45	
NO <sub>x</sub> Emission Rate Estimation Based on Appendix E for Multiple Fuel Hours (New)	325	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Date				6	I6
		16	Hour				2	I2
		18	Average NO <sub>x</sub> emission rate for all fuels during multiple fuel hours				6	F6.3
		Total Record Length						
NO <sub>x</sub> Mass Emissions (New) Subpart H Only	328	1	Record type code	Optional			3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Date				6	I6
		16	Hour				2	I2
		18	Unit operating time				4	F4.2
		22	NO <sub>x</sub> mass emission rate during unit operation				10	F10.1
		32	Total NO <sub>x</sub> mass emissions for the hour				10	F10.1
		42	Formula ID from monitoring plan for total NO <sub>x</sub> mass				3	A3
		45	NO <sub>x</sub> methodology for the hour <sup>10</sup>				10	A10
		55	Heat input rate methodology for the hour <sup>10</sup>				10	A10
Total Record Length							64	

**TABLE 4: QUARTERLY EMISSION DATA FILE RECORD STRUCTURES**

UNIT DATA												
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)				
CO2 MASS EMISSIONS DATA												
CO <sub>2</sub> Mass Emissions Data  (Modified)  ARP Only	330	1	Record type code		YYMMDD	00-23	3	I3				
		4	Unit/Stack/Pipe ID				6	A6				
		10	Date				6	I6				
		16	Hour				2	I2				
		18	CO <sub>2</sub> mass emission rate for the hour				10	F10.1				
		28	Formula ID from monitoring plan for hourly CO <sub>2</sub> mass emission rate				3	A3				
		31	Reserved				2					
		33	Total CO <sub>2</sub> mass emissions for the hour				Optional	ton	10	F10.1		
		43	Use of diluent cap value for CO <sub>2</sub> calculation for this hour (Y-cap used)				CEMS only		Y	1	A1	
Total Record Length							43					
CO <sub>2</sub> Mass Emissions Estimation Parameters  ARP Only	331	1	Record type code		YYMMDD		3	I3				
		4	Unit/Stack ID				6	A6				
		10	Date				6	I6				
		16	Total daily combustion-related CO <sub>2</sub> mass emissions adjusted for CO <sub>2</sub> retained in flyash				ton	10	F10.1			
		26	Total daily sorbent-related CO <sub>2</sub> mass emissions				ton	10	F10.1			
		36	Total daily CO <sub>2</sub> mass emissions				ton	10	F10.1			
Total Record Length							45					
QUALIFYING LOW MASS EMISSIONS UNIT DATA												
Hourly Emissions Data for Qualifying Low Mass Emissions Units  (New)	360	1	Record type code		YYMMDD	00-23	0.0-1.00	3	I3			
		4	Unit ID					6	A6			
		10	Date					6	I6			
		16	Hour					HH	2	I2		
		18	Unit operating time <sup>18</sup>						4	F4.2		
		22	Gross unit load during unit operation					MWe	6	I6		
		28	Steam load					1000 lb/hr	6	I6		
		34	Total hourly heat input (from all fuels)					mmBtu	7	F7.1		
		41	Fuel type <sup>19</sup>						3	A3		
		44	SO <sub>2</sub> mass emissions					ARP only	lb	6	F6.1	
		50	NO <sub>x</sub> mass emissions						lb	6	F6.1	
		56	CO <sub>2</sub> mass emissions					ARP only	ton	9	F9.1	
		65	Control status (C-controlled, U-uncontrolled)							C,U	1	A1
		66	NO <sub>x</sub> methodology for the hour <sup>10</sup>								10	A10
		76	Heat input rate methodology for the hour <sup>10</sup>								10	A10
Total Record Length							85					

<sup>18</sup> For LME units using long term fuel flow and reporting RT 305, report 1.00 for each hour in which any operation occurred.

<sup>19</sup> See instructions for allowable codes. If multiple fuels are burned, report the fuel used to determine mass emissions (fuel with the highest SO<sub>2</sub>, CO<sub>2</sub>, and/or NO<sub>x</sub> emission factor). See §§ 75.19(c)(3)(i), (4)(i), and (5)(i).

**TABLE 5: MONITORING PLAN FILE RECORD STRUCTURES**

MONITORING PLAN INFORMATION									
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)	
Stack/Pipe Header Definition Table (Modified)	503	1	Record type code				3	I3	
		4	Stack/Pipe ID				6	A6	
		10	Stack/Pipe description or name				20	A20	
		30	Unit ID for associated unit				6	A6	
		36	Reserved				1		
		37	Reserved				6		
		43	Reserved				6		
		49	Activation date				YYMMDD	6	I6
		55	Retirement date				YYMMDD	6	I6
		61	Bypass stack flag (B-bypass)				B	1	A1
		62	Stack exit height above ground level				ft	4	I4
		66	Ground level elevation above sea level				ft	5	I5
		71	Inside cross-sectional area at flue exit				ft²	4	I4
		75	Inside cross-sectional area at flow monitor location				ft²	4	I4
Total Record Length							78		
Unit Information (New)	504	1	Record type code				3	I3	
		4	Unit ID				6	A6	
		10	Unit type <sup>10</sup>				3	A3	
		13	Maximum hourly heat input capacity				mmBtu	7	F7.1
		20	Date of first commercial operation				YYYYMMDD	8	I8
		28	Unit retirement date				YYYYMMDD	8	I8
		36	Stack exit height above ground level				ft	4	I4
		40	Ground level elevation above sea level				ft	5	I5
		45	Inside cross-sectional area at flue exit				ft²	4	I4
		49	Inside cross-sectional area at flow monitor location				ft²	4	I4
Total Record Length							52		
Program Indicator for Report (New)	505	1	Record type code				3	I3	
		4	Unit ID				6	A6	
		10	Program/Reporting requirements for which EDR is submitted <sup>20</sup>				10	A10	
		20	Unit classification <sup>10</sup>				2	A2	
		22	Reporting frequency (OS-ozone season, Q-quarterly)				OS,Q	2	A2
		24	Program participation date				YYYYMMDD	8	I8
		32	State regulation code (per State instructions)				OTC and Subpart H only	10	A10
		42	State or local regulatory agency code (see instructions)				OTC and Subpart H only	4	A4
Total Record Length							45		
EIA Cross Reference Information (New)	506	1	Record type code				3	I3	
		4	Unit ID				6	A6	
		10	Acid Rain Program or Subpart H monitoring location ID				6	A6	
		16	EIA boiler ID				5	A5	
		21	EIA flue ID				5	A5	
		26	EIA reporting year				4	I4	
		30	EIA reporting indicator (N-not reporting EIA forms)				N	1	A1
		31	ARP/Subpart H facility/ORISPL number				6	I6	
		37	EIA facility number				6	I6	
Total Record Length							42		

<sup>20</sup> Available codes are: ARP, NBP, OTC-SUBH, SUBH, SIP



**TABLE 5: MONITORING PLAN FILE RECORD STRUCTURES**

MONITORING PLAN INFORMATION								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
Fuel Usage Data to Qualify as a Peaking Unit or an Acid Rain Program Gas-Fired Unit  (New)	507	1	Record type code				3	I3
		4	Unit ID				6	A6
		10	Current calendar year or ozone season		YYYY		4	I4
		14	Ozone Season or Year 1		YYYY		4	I4
		18	Ozone Season or Year 1 type (P-projected, A-actual, D-operating data)			P,A,D	1	A1
		19	Ozone Season or Year 1 % capacity for peaking units or % heat input for gaseous fuel		%	0.0-100.0	5	F5.1
		24	Ozone Season or Year 2		YYYY		4	I4
		28	Ozone Season or Year 2 type (P-projected, A-actual, D-operating data)			P,A,D	1	A1
		29	Ozone Season or Year 2 % capacity for peaking units or % heat input from gaseous fuel		%	0.0-100.0	5	F5.1
		34	Ozone Season or Year 3		YYYY		4	I4
		38	Ozone Season or Year 3 type (P-projected, A-actual, D-operating data)			P,A,D	1	A1
		39	Ozone Season or Year 3 % capacity for peaking units or % heat input from gaseous fuel		%	0.0-100.0	5	F5.1
		44	Three ozone season or year average annual capacity for peaking units or % heat input from gaseous fuel		%	0.0-100.0	5	F5.1
		49	Type of qualification (GF-gas-fired unit, PK-peaking unit, SK-ozone season peaking unit)			GF,PK,SK	2	A2
		51	Method of qualifying as a peaking unit or as a gas-fired unit per § 72.2 <sup>10</sup>				3	A3
Total Record Length							53	
Subpart H Reporting Frequency Change  (New)  <b>Subpart H Only</b>	508	1	Record type code				3	I3
		4	Stack/Unit/Pipe ID				6	A6
		10	New reporting frequency (OS-ozone season only, Q-quarterly)			OS, Q	2	A2
		12	Begin date of new reporting frequency		YYYYMMDD		8	I8
		20	[Reserved]				8	
	28	[Reserved]				1		
Total Record Length							28	
Monitoring Systems/Analytical Components Table  (Modified)	510	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Status (A-add, C-correct, D-delete, U-unchanged)			A,C,D,U	1	A1
		17	System parameter monitored <sup>21</sup>				4	A4
		21	Primary/backup designation <sup>22</sup>				2	A2
		23	Component type code <sup>23</sup>				4	A4
		27	Sample acquisition method <sup>10</sup>				3	A3
		30	Manufacturer				25	A25
		55	Model/version				15	A15
		70	Serial number				20	A20
		90	Reserved				6	
		96	Reserved				4	
		100	First date system reported data		YYYYMMDD		8	I8
		108	Last date system reported data		YYYYMMDD		8	I8
Total Record Length							115	

<sup>21</sup> Limited to a table of codes: System Parameter: CO<sub>2</sub>, FLOW, GAS, H<sub>2</sub>O, LTGS, LTOL, NO<sub>x</sub>, NO<sub>x</sub>C, O<sub>2</sub>, OILM, OILV, OP, SO<sub>2</sub>

<sup>22</sup> Limited to a table of codes: Primary/Backup Designation: P-primary, B-regular non-redundant backup, DB-data backup, RB-redundant backup, RM-reference method backup

<sup>23</sup> Limited to a table of codes: Component Type: BGFF, BOFF, CALR, CO<sub>2</sub>, CO<sub>2</sub>A, CO<sub>2</sub>H, CO<sub>2</sub>L, DAHS, DL, DP, FLC, FLOW, GCH, GFFM, H<sub>2</sub>O, NO<sub>x</sub>, NO<sub>x</sub>A, NO<sub>x</sub>H, NO<sub>x</sub>L, O<sub>2</sub>D, O<sub>2</sub>DA, O<sub>2</sub>DH, O<sub>2</sub>DL, O<sub>2</sub>W, O<sub>2</sub>WA, O<sub>2</sub>WD, O<sub>2</sub>WH, O<sub>2</sub>WL, OFFM, OP, PLC, PRB, PRES, SO<sub>2</sub>, SO<sub>2</sub>A, SO<sub>2</sub>H, SO<sub>2</sub>L, TEMP

**TABLE 5: MONITORING PLAN FILE RECORD STRUCTURES**

MONITORING PLAN INFORMATION								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
Formula Table	520	1	Record type code			A,C,D,U	3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Submission status (A-add, C-correct, D-delete, U-unchanged)				1	A1
		11	Formula ID				3	A3
		14	Parameter monitored <sup>10</sup>				4	A4
		18	Formula code <sup>10</sup>				5	A5
		23	Formula text				200	A200
Total Record Length							222	
Span Table (Modified)	530	1	Record type code			H,L  F,HD,OL,TR,TB,GS  <		

<sup>24</sup> Provide SO<sub>2</sub> and NO<sub>x</sub> MPC/MEC in ppm, rounded to the nearest whole number. Provide CO<sub>2</sub> MPC in %. Provide flow maximum potential flowrate (MPF) in scfh.

<sup>25</sup> For SO<sub>2</sub> and NO<sub>x</sub> use PPM. For CO<sub>2</sub> or O<sub>2</sub> use %. For flow use units corresponding to calibration as follows: ACFH, ACFM, AFPM, INH20, KACFH, KACFM, KAFPM, KSCFH, KSCFM, KSFPM, MACFH, MSCFH, SCFH, SCFM, SFPM.

**TABLE 5: MONITORING PLAN FILE RECORD STRUCTURES**

MONITORING PLAN INFORMATION									
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)	
Maximums, Minimums, Defaults and Constants  (New)	531	1	Record type code			A,C,U	3	I3	
		4	Unit/Stack/Pipe ID				6	A6	
		10	Parameter <sup>10</sup>				4	A4	
		14	Value of default, maximum, minimum or constant				13	F13.3	
		27	Units of measure <sup>26</sup>				7	A7	
		34	Purpose or intended use <sup>10</sup>				3	A3	
		37	Type of fuel <sup>10</sup>				3	A3	
		40	Indicator of use for controlled/uncontrolled hours (A-any hour, C-controlled, U-uncontrolled)				1	A1	
		41	Source of value <sup>10</sup>				4	A4	
		45	Value effective date				YYYYMMDD	8	I8
		53	Value effective hour				HH	2	I2
		55	Value no longer effective date				YYYYMMDD	8	I8
		63	Value no longer effective hour				HH	2	I2
		65	SO <sub>2</sub> emission factor for low mass emissions units				ARP only	lb/mmBtu	6
Total Record Length							70		
Unit and Stack Operating Load Data  (New)	535	1	Record type code	OTC only		MW,ST	3	I3	
		4	Unit/Stack/Pipe ID				6	A6	
		10	Load units (MW-MWe, ST-1000lb steam)				2	A2	
		12	Maximum hourly gross load				6	I6	
		18	Designated normal load				L,M,H	1	A1
		19	Single load testing only (for flow RATA or, for OTC only, heat input RATA) (P-peaking unit, B-bypass stack, and, for OTC only, S-single load test approved by State)				B,P,S	1	A1
Total Record Length							19		
Range of Operation, Normal Load, and Load Usage  (New)	536	1	Record type code	Optional			3	I3	
		4	Unit/Stack ID				6	A6	
		10	Upper boundary of range of operation				MWe, 1000 lb/hr	6	I6
		16	Lower boundary of range of operation				MWe, 1000 lb/hr	6	I6
		22	Two most frequently-used load levels				L,M,H	3	A3
		25	Designated normal load				L,M,H	1	A1
		26	Second designated normal load				L,M,H	1	A1
		27	Date of historical load analysis (activation date)				YYYYMMDD	8	I8
		35	Inactivation date				YYYYMMDD	8	I8
Total Record Length							42		

<sup>26</sup> Limited to a table of codes: %, %H<sub>2</sub>O, BBLHR, BTUHSF, BTULB, BTUHR, GALHR, HSCF, LB, LBBBL, LBGAL, LBHR, LBM3, LBMMBTU, LBSCF, M3HR, MMBTU, MMBTUHR, MMBTULB, PPM, SCFH, MMBTUMW, TNMMBTU

**TABLE 5: MONITORING PLAN FILE RECORD STRUCTURES**

MONITORING PLAN INFORMATION								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
Fuel Flowmeter Data  (Modified)	540	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Parameter monitored			GAS, LTGS, LTOL, OILM, OILV	4	A4
		17	Type of fuel <sup>10</sup>				3	A3
		20	Maximum system fuel flow rate				10	F10.1
		30	Units of measure for maximum fuel flow rate <sup>27</sup>				5	A5
		35	Source of maximum rate (URV-upper range value, UMX-unit max)			URV, UMX	3	A3
		38	Initial accuracy test method				11	A11
		49	Reserved				11	
		60	Submission status (A-add, C-correct, D-delete, U-unchanged)			A,C,D,U	1	A1
Total Record Length							60	
Reasons for Monitoring System Downtime or Missing Parameter  (Optional)	550	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Parameter <sup>10</sup>				4	A4
		14	Monitoring system ID				3	A3
		17	Begin date		YYMMDD		6	I6
		23	Begin hour		HH	00-23	2	I2
		25	End date		YYMMDD		6	I6
		31	End hour		HH	00-23	2	I2
		33	Missing data reason code <sup>10</sup>			1-99	2	I2
		35	Missing data description <sup>28</sup>				75	A75
		110	Corrective action description				75	A75
Total Record Length							184	
Monitoring System Re-certification, Maintenance, or Other Events  (New)	556	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Event code <sup>10</sup>			1-999	3	I3
		19	Code for required test <sup>10</sup>			1-99	2	I2
		21	Date of change to or initial use of monitoring system(s)		YYYYMMDD		8	I8
		29	Hour of change to or initial use of monitoring system(s)		HH	00-23	2	I2
		31	Beginning of conditionally valid period (probationary calibration error test) date		YYYYMMDD		8	I8
		39	Beginning of conditionally valid period (probationary calibration error test) hour		HH	00-23	2	I2
		41	Date that last test is successfully completed		YYYYMMDD		8	I8
		49	Hour that last test is successfully completed		HH	00-23	2	I2
		51	Indicator that conditionally valid data were reported at end of quarter			C	1	A1
Total Record Length							51	

<sup>27</sup> For volumetric flow meters for oil use SCFH (scf/hr); GALHR (gal/hr); BBLHR (barrels/hr); M3HR (M<sup>3</sup>/hr).  
For mass of oil flow meters use LBHR.  
For gas flow meters use HSCF (for 100 scfh).

<sup>28</sup> Optional field. Provide information if code does not adequately explain reason or event or if code 99 (OTHER) is used.

**TABLE 5: MONITORING PLAN FILE RECORD STRUCTURES**

MONITORING PLAN INFORMATION										
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)		
Appendix E NO <sub>x</sub> Correlation Curve Segments (New)	560	1	Record type code		YYYYMMDD	0-99	3	I3		
		4	Unit/Pipe ID				6	A6		
		10	Test date				8	I8		
		18	Test number				2	I2		
		20	Operating level				2	I2		
		22	Segment ID				3	A3		
		25	NO <sub>x</sub> monitoring system ID				3	A3		
		28	Heat input rate #1 (low)				7	F7.1		
		35	Heat input rate #2 (high)				7	F7.1		
		42	NO <sub>x</sub> emission rate #1				6	F6.3		
		48	NO <sub>x</sub> emission rate #2				6	F6.3		
		54	Type of fuel <sup>10</sup>				3	A3		
		57	Identical unit group ID (if applicable)				8	A8		
		Total Record Length							64	
Monitoring Methodology Information (New)	585	1	Record type code			P,S	3	I3		
		4	Unit ID				6	A6		
		10	Parameter <sup>10</sup>				4	A4		
		14	Monitoring methodology <sup>10</sup>				10	A10		
		24	Type of fuel associated with methodology <sup>10</sup>				3	A3		
		27	Primary/secondary methodology indicator				1	A1		
		28	Missing data approach for methodology <sup>10</sup>				6	A6		
		34	Methodology start date				8	I8		
		42	Methodology end date				8	I8		
Total Record Length							49			
Control Equipment Information (New)	586	1	Record type code			P,S O	3	I3		
		4	Unit ID				6	A6		
		10	Parameter (NOX, SO2, PART)				4	A4		
		14	Control equipment code <sup>10</sup>				6	A6		
		20	Primary/secondary controls indicator				1	A1		
		21	Original installation (O-original)				1	A1		
		22	Controls install date				8	I8		
		30	Controls optimization date				8	I8		
		38	Controls retirement date				8	I8		
		46	Seasonal controls indicator(S-ozone season only)				OTC and Subpart H only	S	1	A1
Total Record Length							46			
Unit Fuel Type (New)	587	1	Record type code		YYYYMMDD YYYYMMDD	E,I,P,S	3	I3		
		4	Unit ID				6	A6		
		10	Fuel types combusted <sup>10</sup>				3	A3		
		13	Fuel type start date				8	I8		
		21	Fuel type end date				8	I8		
		29	Primary/secondary/emergency/startup fuel indicator				1	A1		
		30	Ozone season fuel switching flag (S-burned during ozone season for ozone control)				OTC and Subpart H only	S	1	A1
		31	Demonstration method to qualify for monthly fuel sampling for GCV				ARP only	GHS, GGC, GOC	3	A3
		34	Demonstration method to qualify for daily fuel sampling for %S					SHS, SGC	3	A3
Total Record Length							36			

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA											
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)			
CALIBRATION/ERROR TESTS											
7-Day Calibration Error Test Data and Results  (Modified)	600	1	Record type code		YYMMDD HH	00-23	3	I3			
		4	Unit/Stack ID				6	A6			
		10	Component ID				3	A3			
		13	Monitoring system ID				3	A3			
		16	Date				6	I6			
		22	Hour				2	I2			
		24	Instrument span				13	F13.3			
		37	Reference value		13	F13.3					
		50	Measured value		13	F13.3					
		63	Results (calibration error or  R-A )		% , ppm	0.0-100.0	5	F5.1			
		68	Alternative performance specification (APS) flag <sup>7</sup>			0,1	1	I1			
		69	Reference signal or calibration gas level (Z-zero, M-mid, H-high)			Z,M,H	1	A1			
		70	Span scale (H-high, L-low)			H,L	1	A1			
		71	Test number				2	I2			
		73	Reason for test (C-initial cert, D-diagnostic, R-recert)			C,D,R	2	A2			
Total Record Length							74				
LINEARITY CHECKS											
Linearity Check Data  (Modified)	601	1	Record type code		YYMMDD HHMM	0000-2359	3	I3			
		4	Unit/Stack ID				6	A6			
		10	Component ID				3	A3			
		13	Monitoring system ID				3	A3			
		16	Date				6	I6			
		22	Time				4	I4			
		26	Instrument span				13	F13.3			
		39	Reference value		13	F13.3					
		52	Measured value		13	F13.3					
		65	Calibration gas level (Z-zero, L-low, M-mid, H-high)			Z,L,M,H	1	A1			
		66	Span scale (H-high, L-low)			H,L	1	A1			
		67	Test number				2	I2			
		69	Indicator of aborted test (A-aborted test)			A	1	A1			
		Total Record Length							69		
		Linearity Check Results  (Modified)	602		1	Record type code		YYMMDD		3	I3
4	Unit/Stack ID			6	A6						
10	Component ID			3	A3						
13	Monitoring system ID			3	A3						
16	Date			6	I6						
22	Instrument span			13	F13.3						
35	Mean of reference values			13	F13.3						
48	Mean of measured values			13	F13.3						
61	Results (linearity error or  R-A )			% , ppm	0.0-100.0	5		F5.1			
66	Alternative performance specification (APS) flag <sup>7</sup>				0,1	1		I1			
67	Reserved					4					
71	Calibration gas level (Z-zero, L-low, M-mid, H-high)				Z,L,M,H	1		A1			
72	Span scale (H-high, L-low)				H,L	1		A1			
73	Test number					2		I2			
75	Reason for test (C-initial cert, D-diagnostic, R-recert, Q-QA, G-grace period QA)				C,D,R,Q, RG,RQ,G	2		A2			
Total Record Length							76				

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA										
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)		
LEAK CHECKS										
Flow Leak Check Results  (Modified)	603	1	Record type code				3	I3		
		4	Unit/Stack ID				6	A6		
		10	Component ID				3	A3		
		13	Monitoring system ID				3	A3		
		16	Date				YYMMDD	6	I6	
		22	Hour				HH	00-23	2	I2
		24	Status (P-pass, F-fail)					P,F	1	A1
		25	Reserved						4	
		29	Reason for test (D-diagnostic, Q-QA, G-grace period QA)					D,Q,G	2	A2
Total Record Length							30			
FLOW/LOAD CHECKS										
Reference Data for Flow-to-Load Ratio or Gross Heat Rate Evaluation  (New)	605	1	Record type code				3	I3		
		4	Unit/Stack ID				6	A6		
		10	Monitoring system ID				3	A3		
		13	Reference flow RATA end date				YYYYMMDD	8	I8	
		21	Reference RATA end time				HHMM	0000-2359	4	I4
		25	Test number						2	I2
		27	Average gross unit load (MWe or Steam)				MWe, 1000 lb/hr steam		6	I6
		33	Operating level (L-low, M-mid, H-high) (N-normal, for peaking units only)					L,M,H,N	1	A1
		34	Average reference method flow rate during reference flow RATA				scfh		10	I10
		44	Reference flow/load ratio						6	F6.2
		50	Average hourly heat input rate during RATA				mmBtu/hr		7	F7.1
		57	Reference gross heat rate (GHR) value				Btu/kw-hr, Btu/lb steam		6	I6
Total Record Length							62			

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
FLOW/LOAD CHECKS								
Quarterly Flow-to-Load Ratio or Gross Heat Rate Check (New)	606	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Calendar quarter and year		QYYYY		5	I5
		18	Test basis indicator (Q-flow-to-load ratio; H-gross heat rate)			Q,H	1	A1
		19	Bias adjusted flow rates used (Y,N)			Y,N	1	A1
		20	Average absolute % difference between reference ratio (or GHR) and hourly ratios (or GHR values), E <sub>r</sub>		%	0.0-100.0	5	F5.1
		25	Result (P-pass, F-fail, N-<168 hours within ± 10% of average load, E-<168 hours for data analysis after exempted hours removed)			P,F,N,E	1	A1
		26	Number of hours used in quarterly flow-to-load or GHR analysis		hrs		4	I4
		30	Number of hours excluded for different type of fuel		hrs		4	I4
		34	Number of hours excluded for load ramping up or down		hrs		4	I4
		38	Number of hours excluded for scrubber bypass		hrs		4	I4
		42	Number of excluded hours preceding a normal load flow RATA		hrs		4	I4
46	Number of excluded hours preceding a successful diagnostic test, following a documented monitor repair, or following a major component replacement		hrs		4	I4		
50	Number of hours excluded for flue gases discharging simultaneously through a main stack and bypass stack		hrs		4	I4		
Total Record Length							53	



**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
RATA/BIAS TESTS								
RATA and Bias Test Data  (Modified)	610	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Run start date		YYMMDD		6	I6
		19	Run start time		HHMM	0000-2359	4	I4
		23	Run end date		YYMMDD		6	I6
		29	Run end time		HHMM	0000-2359	4	I4
		33	Units of measure (1-ppm, 2-lb/mmBtu, 3-scfh, 4-%CO <sub>2</sub> , 5-%O <sub>2</sub> 6-mmBtu/hr (OTC NBP only), 7-%H <sub>2</sub> O)			1-7	1	I1
		34	Value from CEM system being tested				13	F13.3
		47	Value from reference method, adjusted as necessary for moisture and/or calibration bias				13	F13.3
		60	Run number				2	I2
		62	RATA run status flag 0 - RATA used, run not used 1 - run data used in calculating relative accuracy and bias 9 - test aborted			0,1,9	1	I1
		63	Operating level (L-low, M-mid, H-high) (Use N-normal for peaking units only)			L,M,H,N	1	A1
		64	Gross unit load		MWe, 1000 lbs/hr		6	I6
70	Test number				2	I2		
Total Record Length							71	

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
RATA/BIAS TESTS								
RATA and Bias Test Results  (Modified)	611	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	RATA end date		YYMMDD		6	I6
		19	RATA end time		HHMM	0000-2359	4	I4
		23	Reference method used <sup>10</sup>				11	A11
		34	Units of measure (1-ppm, 2-lb/mmBtu, 3-scfh, 4-%CO <sub>2</sub> ,5-%O <sub>2</sub> , 6-mmBtu/hr, 7-%H <sub>2</sub> O)			1-7	1	I1
		35	Arithmetic mean of CEMS values				13	F13.3
		48	Arithmetic mean of reference method values				13	F13.3
		61	Arithmetic mean of the difference data				13	F13.3
		74	Standard deviation of difference data				13	F13.3
		87	Confidence coefficient				13	F13.3
		100	Relative accuracy				5	F5.2
		105	Tabulated t- value (bias test)				6	F6.3
		111	Adjustment factor				5	F5.3
		116	Operating level (L-low, M-mid, H-high) (Use N-normal, for peaking units only)			L,M,H,N	1	A1
		117	Average gross unit load (MWe or steam)			MWe, 1000 lbs/hr	6	I6
		123	Reserved				4	
		127	Indication of normal load (N-normal, otherwise, blank)			N	1	A1
		128	Alternative performance specification (APS) flag <sup>7</sup>			0,1	1	I1
129	Test number				2	I2		
131	Reason for RATA (C-initial cert, D-diagnostic, R-recert, Q-QA, G-grace period QA)			C,D,R,Q, RQ,G, QD	2	A2		
133	Number of load levels comprising test (1 for gas RATAs, 1-3 for flow or heat input RATAs)			1-3	1	I1		
134	Bias adjustment factor resulting from multiple load RATA				5	F5.3		
Total Record Length							138	

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
RATA/BIAS TESTS								
Reference Method Supporting Data for Flow RATA Tests  (Methods 2, 2F, 2G, and 2H)  Run Level Data  (New)	614	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Test number				2	I2
		15	Operating level			H,M,L,N	1	A1
		16	Run number				2	I2
		18	Run start date		YYYYMMDD		8	I8
		26	Run start time		HHMM	0000-2359	4	I4
		30	Run end date		YYYYMMDD		8	I8
		38	Run end time		HHMM	0000-2359	4	I4
		42	Flow rate reference method(s) used			2F,2G, 2FH, 2GH, M2H	3	A3
		45	Number of traverse points				2	I2
		47	P <sub>bar</sub> , barometric pressure, in. Hg			in. Hg	5	F5.2
		52	P <sub>g</sub> , stack static pressure, in. H <sub>2</sub> O			in. H <sub>2</sub> O	5	F5.2
		57	% CO <sub>2</sub> in stack gas, dry basis			%	5	F5.1
		62	% O <sub>2</sub> in stack gas, dry basis			%	5	F5.1
		67	CO <sub>2</sub> and O <sub>2</sub> reference method			3,3A	4	A4
		71	% moisture in stack gas			%H <sub>2</sub> O	5	F5.1
		76	M <sub>d</sub> , stack gas molecular weight, dry basis			lbs/lbs-mole	5	F5.2
		81	M <sub>s</sub> , stack gas molecular weight, wet basis			lbs/lbs-mole	5	F5.2
86	Stack diameter at test port location			ft	5	F5.2		
91	A <sub>s</sub> , stack or duct cross-sectional area at test port			ft <sup>2</sup>	6	F6.1		
97	v <sub>s</sub> , Average velocity for run, not accounting for wall effects			ft/sec	6	F6.2		
103	v <sub>s</sub> , Average velocity for run, accounting for wall effects			ft/sec	6	F6.2		
109	Calculated wall effects adjustment factor (WAF) derived from this test run				6	F6.4		
115	Calculated WAF applied to all runs of this RATA				≥0.9700	6	F6.4	
121	Default WAF applied to all runs of this RATA				0.9900, 0.9950	6	F6.4	
127	Average stack flow rate, wet basis, adjusted if applicable for wall effects				scfh	10	I10	
Total Record Length							136	

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
RATA/BIAS TESTS								
Reference Method Supporting Data for Flow RATA Tests  (Methods 2, 2F, 2G, and 2H)  Traverse Point Level Data  (New)	615	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Test number				2	I2
		15	Operating level			L,M,H,N	1	A1
		16	Run number				2	I2
		18	Reference method probe type			S,P,AS,DA,DAT,SPH	4	A4
		22	Probe ID				11	A11
		33	Pressure measurement device type			MN,MG,ET	2	A2
		35	Method 1 traverse point ID				3	A3
		38	Probe or pitot tube velocity calibration coefficient				5	F5.3
		43	Date of latest probe or pitot tube calibration		YYYYMMDD		8	I8
		51	Average velocity differential pressure at traverse point		in. H <sub>2</sub> O		5	F5.3
		56	Average of square roots of velocity differential pressures at traverse point		(in H <sub>2</sub> O) <sup>1/2</sup>		5	F5.3
		61	T <sub>s</sub> , stack temperature at traverse point		°F		5	F5.1
		66	Exterior Method 1 traverse point identifier			W	1	A1
		67	Number of wall effects measurement points used to derive replacement velocity				2	I2
		69	Yaw angle of flow at traverse point		degrees	-179.9 to +180.0	6	F6.1
		75	Pitch angle of flow at traverse point		degrees	-179.9 to +180.0	6	F6.1
81	Calculated velocity at traverse point, not accounting for wall effects		ft/sec		6	F6.2		
87	Replacement velocity at traverse point, accounting for wall effects		ft/sec		6	F6.2		
Total Record Length							92	
Reference Method Supporting Data for Flow RATA Tests  (Method 2 and 2H, default WAF only)  (New)	616	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Test number				2	I2
		15	Operating level			L,M,H,N	1	A1
		16	RATA end date		YYYYMMDD		8	I8
		24	RATA end time		HHMM	0000-2359	4	I4
		28	Default wall effects adjustment factor used			0.9900, 0.9950	6	F6.4
Total Record Length							33	

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
CYCLE TIME TEST								
Cycle Time Test Data and Results (Modified)	621	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Start time		HHMM	0000-2359	4	I4
		26	End time		HHMM	0000-2359	4	I4
		30	Component cycle time		min		2	I2
		32	Stable starting monitor value				13	F13.3
		45	Stable ending monitor value				13	F13.3
		58	Calibration gas value				13	F13.3
		71	Calibration gas level (Z-zero, H-high)			Z,H	1	A1
		72	Total or system cycle time <sup>29</sup>		min		2	I2
		74	Reason for test (C-initial cert, D-diagnostic, R-recert)			C,D,R	2	A2
		76	Test number				2	I2
Total Record Length							77	
ON LINE/OFF LINE CALIBRATION DEMONSTRATION								
Qualifying Test for Off-line Calibration Error Tests (New)	623	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Date		YYMMDD		6	I6
		22	Hour		HH	00-23	2	I2
		24	Instrument span				13	F13.3
		37	Reference value				13	F13.3
		50	Measured value				13	F13.3
		63	Results (CE or  R-A )		%,ppm	0.00-100.0	5	F5.1
		68	Alternative specification flag <sup>7</sup>			0,1	1	I1
		69	Reserved				2	
		71	Calibration gas or reference signal level (Z-zero, M-mid, H-high)			Z,M,H	1	A1
		72	Span scale (H-high, L-low)			H,L	1	A1
		73	Off-line/On-line indicator (OFF-unit not operating, ON-unit operating)			ON,OFF	3	A3
76	Reason for test (C-initial demonstration, D-diagnostic)			C,D	1	A1		
77	Test number				2	I2		
Total Record Length							78	

<sup>29</sup> For NO<sub>x</sub> and SO<sub>2</sub> emission rate (lb/mmBtu) systems, report the longer cycle time of the two component analyzers as the system cycle time.

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
MISCELLANEOUS QA TEST/ACTIVITY								
Other QA Activities  (New)	624	1	Record type code				3	I3
		4	Unit/Stack/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Parameter				4	A4
		20	Activity/test completion date		YYYYMMDD		8	I8
		28	Activity/test completion hour		HH	00-23	2	I2
		30	QA test activity description				20	A20
		50	Test result (P-pass, F-fail)			P,F	1	A1
		51	Reason for test (C-initial cert, D-diagnostic, R-recert, Q-QA)			C,D,R,Q, RQ	2	A2
	53	QA test code			01,02,03, 99	2	I2	
Total Record Length							54	
FUEL FLOWMETER ACCURACY CHECKS								
Fuel Flowmeter Accuracy Test  (New)	627	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Test completion date		YYYYMMDD		8	I8
		24	Test completion hour		HH		2	I2
		26	Reinstallation date (leave blank for in-line test)		YYYYMMDD		8	I8
		34	Reinstallation hour (leave blank for in-line test)		HH		2	I2
		36	Accuracy at low fuel flowrate (% of URV)		%		5	F5.1
		41	Highest accuracy at mid fuel flowrate (% of URV)		%		5	F5.1
		46	Accuracy at high fuel flowrate (% of URV)		%		5	F5.1
		51	Test method (L-lab comparison to reference meter, I-in-line comparison to master meter)			I,L	1	A1
		52	Test result (A-aborted, P-pass, F-fail)			A,P,F	1	A1
		53	Test number				2	I2
Total Record Length							54	
Accuracy Test for Orifice, Nozzle, or Venturi Type Fuel Flowmeters  (New)	628	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Test completion date		YYYYMMDD		8	I8
		24	Test completion hour		HH		2	I2
		26	Accuracy determination at low level <sup>30</sup>		%		5	F5.1
		31	Accuracy determination methodology for low level <sup>10</sup>				4	A4
		35	Highest accuracy determination at mid level <sup>30</sup>		%		5	F5.1
		40	Accuracy determination methodology for mid level <sup>10</sup>				4	A4
		44	Accuracy determination at high level <sup>30</sup>		%		5	F5.1
		49	Accuracy determination methodology for high level <sup>10</sup>				4	A4
		53	Test result (A-aborted, P-pass, F-fail)			A,P,F	1	A1
		54	Test number				2	I2
Total Record Length							55	

<sup>30</sup> Report either: (1) the highest individual accuracy of any of the three transmitters; or (2) the sum of the three transmitter accuracies; or (3) the total fuel flowmeter accuracy calculated according to AGA3 part 1, "General Equations and Uncertainty Guidelines."

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
QUARTERLY FUEL FLOW-TO-LOAD ANALYSIS								
Baseline Data for Fuel-Flow-to-Load Ratio or Gross Heat Rate Check for Fuel Flowmeters  (New)	629	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Completion date of most recent primary element inspection		YYYYMMDD		8	I8
		21	Completion hour of most recent primary element inspection		HH		2	I2
		23	Completion date of most recent flowmeter or transmitter accuracy test		YYYYMMDD		8	I8
		31	Completion hour of most recent flowmeter or transmitter accuracy test		HH		2	I2
		33	Beginning date of baseline period		YYYYMMDD		8	I8
		41	Beginning hour of baseline period		HH		2	I2
		43	Completion date of baseline period		YYYYMMDD		8	I8
		51	Completion hour of baseline period		HH		2	I2
		53	Average fuel flow rate (100 scfh for gas and lb/hr for oil)				10	F10.1
		63	Average load (MWe or 1000 lb/stream/hr)				6	I6
		69	Baseline fuel-flow-to-load ratio				6	F6.2
		75	Units of fuel-flow-to-load (1-100scfh/MWe, 2-100scfh/klb per hour steam, 3-(lb/hr)/MWe, 4-(lb/hr)/klb per hour steam load)			1-4	1	I1
		76	Average hourly heat input rate		mmBtu/hr		7	F7.1
		83	Baseline GHR				6	I6
		89	Units of baseline GHR (1 - Btu/kwh, 2 - Btu/lb steam)			1-2	1	I1
		90	Number of hours excluded due to co-firing		hrs		3	I3
		93	Number of hours excluded due to ramping		hrs		3	I3
96	Number of excluded hours in lower 25% of range of operation		hrs		3	I3		
99	Flag indicating baseline data collection is in progress and that < 4 calendar quarters have elapsed since quarter of the last flowmeter QA test			B	1	A1		
Total Record Length							99	
Quarterly Fuel- Flow-to-Load Test for Fuel Flowmeters  (New)	630	1	Record type code				3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Component ID				3	A3
		16	Calendar quarter and year		QYYYY		5	I5
		21	Test basis indicator (Q-flow-to-load ratio, H-gross heat rate)			Q,H	1	A1
		22	Quarterly average absolute % difference between baseline ratio (or baseline GHR) and hourly quarterly ratios (or GHR values), E <sub>r</sub>		%	0.0-100.0	5	F5.1
		27	Result (P-pass, F-fail, N-<168 hours data, E-<168 hours of data after exemptions removed, B-baseline data collection in progress)			P,F,N,E,B	1	A1
		28	Number of hours used in the quarterly data analysis		hrs		4	I4
		32	Number of hours excluded due to co-firing		hrs		4	I4
		36	Number of hours excluded due to ramping		hrs		4	I4
		40	Number of excluded hours in lower 25% of range of operation		hrs		4	I4
Total Record Length							43	

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
ALTERNATIVE MONITORING PETITION DATA								
Alternative Monitoring System Approval Petition Data  (Renumbered from EDR v1.3 RT 630)	640	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	AMS ID				6	A6
		22	Date	YYMMDD		6	I6	
		28	Hour	HH	00-23	2	I2	
		30	Hourly test data for alternative monitoring system			13	F13.3	
		43	Hourly lognormalized test data for alternative monitoring system			13	F13.3	
		56	Hourly test data for reference CEMS			13	F13.3	
		69	Fuel type code			2	I2	
		71	Operating level (L-low, M-mid, H-high) (Use N-normal for peaking units only)		L,M,H,N	1	A1	
		72	Gross unit load		MWe	6	I6	
Total Record Length							77	



**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA									
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)	
ALTERNATIVE MONITORING PETITION DATA									
Alternative Monitoring System Approval Petition Results and Statistics  (Renumbered from EDR v1.3 RT 631)	641	1	Record type code				3	I3	
		4	Unit/Stack ID				6	A6	
		10	Component ID				3	A3	
		13	Monitoring system ID				3	A3	
		16	Unit of measure (1-ppm, 2-lb/mmBtu, 3-scfh, 4-%CO <sub>2</sub> , 5-%O <sub>2</sub> , 6-mmBtu/hr, 7-%H <sub>2</sub> O)			1-7	1	A1	
		17	Arithmetic mean of AMS values				13	F13.3	
		30	Arithmetic mean of CEM values				13	F13.3	
		43	Arithmetic mean of differences of paired AMS and CEM values				13	F13.3	
		56	Variance of differences				13	F13.3	
		69	Variance of measured values of AMS				13	F13.3	
		82	Variance of measured values for CEM				13	F13.3	
		95	F-statistic				13	F13.3	
		108	Critical value of F at 95% confidence level for sample size				13	F13.3	
		121	Coefficient of correlation (Pearson's r) of CEM and AMS data				13	F13.3	
		134	Shapiro-Wilk test statistic (W) for AMS data				13	F13.3	
		147	Shapiro-Wilk test statistic (W) for CEMS data				13	F13.3	
		160	Lognormally adjusted data used in final analysis (1=yes, 0=no)				0,1	1	I1
		161	Autocorrelation coefficient (ρ) for AMS data					13	F13.3
		174	Autocorrelation coefficient (ρ) for CEM data					13	F13.3
		187	Autocorrelation coefficient (ρ) for differences of paired AMS and CEM data					13	F13.3
		200	Adjustment for autocorrelation used in final analysis (1=yes, 0=no)				0,1	1	I1
		201	Covariance of alternative monitoring data and associated lag(1) values					13	F13.3
		214	Covariance of continuous emission monitoring data and associated lag(1) values					13	F13.3
		227	Covariance of differences of paired AMS and CEM data					13	F13.3
		240	Standard deviation of AMS data					13	F13.3
		253	Standard deviation of CEM data					13	F13.3
		266	Standard deviation of differences of paired AMS and CEM data					13	F13.3
		279	Standard deviation of lag(1) AMS data					13	F13.3
		292	Standard deviation of lag(1) CEM data					13	F13.3
		305	Standard deviation of lag(1) differences of paired AMS and CEM data					13	F13.3
		318	Variance inflation factor for AMS data					13	F13.3
		331	Variance inflation factor for CEM data					13	F13.3
344	Variance inflation factor for difference of paired AMS and CEM data					13	F13.3		
Total Record Length							356		

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA										
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)		
LOW MASS EMISSIONS CERTIFICATION DATA										
Qualifying Data for Low Mass Emissions Units Excepted Methodology (New)	645	1	Record type code				3	I3		
		4	Unit ID				6	A6		
		10	Current calendar year of application				YYYY	YR,OS	4	I4
		14	Type of qualification						2	A2
		16	Year 1				YYYY	4	I4	
		20	Annual or OS measured/projected NO <sub>x</sub> mass emissions for Year 1				ton	4	F4.1	
		24	Annual or OS NO <sub>x</sub> mass calculated from emission factors for Year 1				ton	4	F4.1	
		28	Annual measured/projected SO <sub>2</sub> mass emissions for Year 1				ARP only	ton	4	F4.1
		32	Annual SO <sub>2</sub> mass calculated from emission factors for Year 1				ARP only	ton	4	F4.1
		36	Annual or OS operating hours for Year 1					hrs	4	I4
		40	Year 2				YYYY	4	I4	
		44	Annual or OS measured/projected NO <sub>x</sub> mass emissions for Year 2				ton	4	F4.1	
		48	Annual or OS NO <sub>x</sub> mass calculated from emission factors for Year 2				ton	4	F4.1	
		52	Measured/projected SO <sub>2</sub> mass emissions for Year 2				ARP only	ton	4	F4.1
		56	Annual SO <sub>2</sub> mass calculated from emission factors for Year 2				ARP only	ton	4	F4.1
		60	Annual or OS operating hours for Year 2					hrs	4	I4
		64	Year 3				YYYY	4	I4	
		68	Annual or OS measured/projected NO <sub>x</sub> mass emissions for Year 3				ton	4	F4.1	
		72	Annual or OS NO <sub>x</sub> mass calculated from emission factors for Year 3				ton	4	F4.1	
		76	Measured/projected SO <sub>2</sub> mass emissions for Year 3				ARP only	ton	4	F4.1
80	Annual SO <sub>2</sub> mass calculated from emission factors for Year 3	ARP only	ton	4	F4.1					
84	Annual or OS operating hours for Year 3		hrs	4	I4					
Total Record Length							87			

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA										
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)		
APPENDIX E AND UNIT SPECIFIC DEFAULT EMISSION RATE TEST DATA										
NO <sub>x</sub> Emission Rate Correlation Test Data  (Modified)	650	1	Record type code	Appendix E only			3	I3		
		4	Unit/Pipe ID			6	A6			
		10	Monitoring system ID for Appendix E NO <sub>x</sub> system			3	A3			
		13	Reference method run start date		YYMMDD	6	I6			
		19	Reference method run start time		HHMM	0000-2359	4	I4		
		23	Reference method run end date		YYMMDD	6	I6			
		29	Reference method run end time		HHMM	0000-2359	4	I4		
		33	Reference method response time		sec	0-800	3	I3		
		36	Value from reference method during run		lb/mmBtu		8	F8.3		
		44	Run number				2	I2		
		46	Operating level (1-lowest)			1-99	2	I2		
		48	Type of fuel combusted <sup>10</sup>				1	A1		
		49	Total heat input during the run		mmBtu		7	F7.1		
		56	Reserved				3			
		59	Hourly heat input rate during run		mmBtu/hr		7	F7.1		
		66	Test number				2	I2		
		68	Flag to indicate highest NO <sub>x</sub> emission rate for unit-specific, fuel-specific NO <sub>x</sub> emission rate testing (H-highest value)			H	1	A1		
		69	Adjusted NO <sub>x</sub> default rate		LME unit default testing only	lb/mmBtu	6	F6.3		
		Total Record Length							74	
		NO <sub>x</sub> Emission Rate Correlation Results  (Modified)	651	1	Record type code				3	I3
4	Unit/Pipe ID				6		A6			
10	Monitoring system ID for Appendix E NO <sub>x</sub> system				3		A3			
13	Completion date of last run in level			YYMMDD	6		I6			
19	Completion time of last run in level			HHMM	0000-2359		4	I4		
23	Arithmetic mean of reference method values at this level			lb/mmBtu			8	F8.3		
31	F-factor converting NO <sub>x</sub> concentrations to emission rates						10	F10.1		
41	Average heat input rate at this level			mmBtu/hr			7	F7.1		
48	Operating level (1-lowest)				1-99		2	I2		
50	Type of fuel combusted <sup>10</sup>						1	A1		
51	Test number						2	I2		
Total Record Length							52			

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
APPENDIX E AND UNIT SPECIFIC DEFAULT EMISSION RATE TEST DATA								
Heat Input from Oil Combusted During Test  (Modified)	652	1	Record type code		YYMMDD  HHMM	0000-2359	3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID for oil fuel flow system				3	A3
		13	Run start date				6	I6
		19	Run start time				4	I4
		23	Run end date		YYMMDD	6	I6	
		29	Run end time		HHMM	4	I4	
		33	Run number			2	I2	
		35	Mass of oil combusted during run		lb	10	F10.1	
		45	Gross calorific value (GCV) of oil			10	F10.1	
		55	Heat input from oil during run		mmBtu	7	F7.1	
		62	Volume of oil combusted during run			10	F10.1	
		72	Units of measure for oil flow <sup>10</sup>			5	A5	
		77	Density of oil			8	F8.6	
		85	Units of measure for density of oil <sup>10</sup>			5	A5	
		90	Test number			2	I2	
		92	Units of measure for GCV <sup>10</sup>			6	A6	
Total Record Length							97	
Heat Input from Gas Combusted During Test  (Modified)	653	1	Record type code		YYMMDD  HHMM	0000-2359	3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID for gas fuel flow system				3	A3
		13	Run start date				6	I6
		19	Run start time				4	I4
		23	Run end date		YYMMDD	6	I6	
		29	Run end time		HHMM	4	I4	
		33	Volume of gas combusted during run		100 scf	10	F10.1	
		43	Gross calorific value (GCV) of gas		Btu/100 scf	10	F10.1	
		53	Heat input from gas during run		mmBtu	7	F7.1	
		60	Test number			2	I2	
Total Record Length							61	
Unit Group Testing  (New)	660	1	Record type code			AE,OT, NT	3	I3
		4	Group ID				8	A8
		12	ORIS code or facility ID				6	I6
		18	Plant name				20	A20
		38	Unit ID				6	A6
		44	Test status (AE-App. E testing performed, OT-other testing performed (NBP only), NT-no testing performed)			2	A2	
		46	Test date for unit (blank, if not tested)		YYYYMMDD	8	I8	
		54	Default rate from identical unit testing (if applicable)		lb/mmBtu	6	F6.3	
		60	Purpose of group tests (AE-Appendix E, DF-default rate)			2	A2	
		62	Type of fuel <sup>10</sup>			1	A1	
		63	NO <sub>x</sub> monitoring system ID		OTC Appendix E only	3	A3	
Total Record Length							65	

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
QA TEST EXTENSIONS/EXEMPTION CLAIMS								
Single-load Flow RATA Claim  (New)	695	1	Record type code		YYYYMMDD	0-100.0	3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	End date of last annual flow RATA				8	I8
		21	End date of historical load data collection period				8	I8
		29	Historical % usage of low load level ( $\leq 30.0\%$ of range of operation) in the load data collection period		%	0-100.0	5	F5.1
		34	Historical % usage of mid load level ( $>30.0$ through $60.0\%$ of range of operation) in the load data collection period		%	0-100.0	5	F5.1
		39	Historical % usage of high load level ( $>60.0\%$ of range of operation) in the load data collection period		%	0-100.0	5	F5.1
		44	Load level for the single-load flow RATA			L,M,H	1	A1
Total Record Length							44	
Fuel Flowmeter Accuracy Test Extension  (New)	696	1	Record type code		YYYYMMDD	1-4	3	I3
		4	Unit/Pipe ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date of last accuracy test				8	I8
		21	Accuracy test expiration date without extension				8	I8
		29	Accuracy test expiration date with extension		YYYYMMDD	8	I8	
		37	Type of extension <sup>31</sup>			2	I2	
		39	Quarter and year		QYYYY	5	A5	
		Total Record Length						
RATA Deadline Extension or Exemption  (New)	697	1	Record type code		YYYYMMDD	1-8	3	I3
		4	Unit/Stack ID				6	A6
		10	Monitoring system ID				3	A3
		13	Date of last RATA				8	I8
		21	RATA expiration date without extension				8	I8
		29	RATA expiration date with extension		YYYYMMDD	8	I8	
		37	Type of RATA extension or exemption claimed or lost <sup>32</sup>			2	I2	
		39	Year-to-date usage of fuel with sulfur content higher than very low sulfur fuel (as defined in § 72.2)		hrs	4	I4	
		43	Year-to-date hours of regular non-redundant back-up CEMS use at this unit/stack		hrs	4	I4	
		47	Quarter and year		QYYYY	5	A5	
Total Record Length							51	

<sup>31</sup> Limited to table of codes: 1 Accuracy test extension (reporting quarter does not qualify as a "fuel flowmeter QA operating quarter")  
2 Accuracy test extension based on successful fuel flow-to-load ratio or GHR test  
3 Accuracy test extension based on ongoing baseline data collection for fuel-to-load ratio or GHR test  
4 Extension claimed because fewer than 168 hours of fuel flowmeter data remained for fuel flow-to-load ratio analysis, after allowable data exclusions were taken under Section 2.1.7.3 of Appendix D

<sup>32</sup> Limited to table of codes: 1 RATA deadline extension claimed for the monitoring system identified in RT 697/10. Unit/stack operated for fewer than 168 hours this quarter  
2 SO<sub>2</sub> RATA deadline extension claimed. Only very low sulfur fuel (as defined in §72.2) was combusted this quarter  
3 Ongoing SO<sub>2</sub> RATA exemption claimed. Only very low sulfur fuel (as defined in §72.2) was combusted this quarter  
4 Conditional SO<sub>2</sub> RATA exemption claimed. Year-to-date usage of fuel with a higher sulfur content than 'very low sulfur' fuel (as defined in §72.2) is  $\leq 480$  hours.  
5 Conditional RATA exemption claimed. Year-to-date usage of a regular (B) non-redundant backup monitoring system at this unit/stack is  $< 720$  hours and less than 8 full quarters have elapsed since last RATA  
6 Ongoing SO<sub>2</sub> RATA exemption lost. Fuel with a higher sulfur content than very low sulfur fuel (as defined in §72.2) was combusted this quarter  
7 Conditional SO<sub>2</sub> RATA exemption lost. Year-to-date usage of fuel with a higher sulfur content than very low sulfur fuel (as defined in §72.2) has exceeded 480 hours  
8 Conditional RATA exemption lost. Year-to-date usage of a regular non-redundant backup monitoring system has exceeded 720 hours at this unit or stack

**TABLE 6: CERTIFICATION TEST DATA AND RESULTS**

CERTIFICATION TEST DATA								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	FIELD NOTES	UNITS	RANGE	LENGTH	FORMAT (FTN)
QA TEST EXTENSIONS/EXEMPTION CLAIMS								
Quarterly QA Test Exemption Claim  (New)	698	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Basis for exemption <sup>33</sup>			1-9	1	I1
		17	Type of test			F,K,L	1	A1
		18	Quarter and year		QYYYYY		5	I5
		23	Span scale			L,H	1	A1
Total Record Length							23	
QA Test Extension Claim Based on Grace Period  (New)	699	1	Record type code				3	I3
		4	Unit/Stack ID				6	A6
		10	Component ID				3	A3
		13	Monitoring system ID				3	A3
		16	Type of test (K-Leak Test, L-linearity, R-RATA)			K,L,R	1	A1
		17	Beginning of grace period		YYYYMMDD		8	I8
		25	Date of completion of required QA test		YYYYMMDD		8	I8
		33	Hour of completion of required QA test		HH	00-23	2	I2
		35	Number of unit/stack operating hours from beginning of grace period to completion of QA test or maximum allowable grace period		hrs		3	I3
		38	Date of end of grace period		YYYYMMDD		8	I8
		46	Hour of end of grace period		HH	00-23	2	I2
Total Record Length							47	

<sup>33</sup>

- 1 Exemption for fewer than 168 unit/stack operating hours in quarter or reporting period
- 2 Linearity exemption analyzer range not used during calendar quarter (dual span only)
- 3 Flow-to-load test exemptions approved by petition under §75.66 and Section 7.8 of Appendix A
- 4 Linearity exemption for SO<sub>2</sub> or NO<sub>x</sub> analyzer span value ≤ 30 ppm

**TABLE 7: COMPLIANCE CERTIFICATION DATA**

CERTIFICATION INFORMATION									
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	PROGRAM	UNITS	RANGE	LENGTH	FORMAT (FTN)	
CERTIFICATION DATA									
Part 75 Certification Statement and Designated Representative Signature  ARP Only	900	1	Record type code				3	I3	
		4	Electronic representation of Part 75 certification statements <sup>34</sup>				18	A18	
		22	DR last name				25	A25	
		47	DR first name				15	A15	
		62	DR middle initial				2	A2	
		64	Date of signature				YYMMDD	6	I6
		70	Title (DR or ADR)				DR,ADR	3	A3
Total Record Length							72		
Part 72 Certification Statement  ARP Only	901	1	Record type code			1-12	3	I3	
		4	Certification statement line #				2	I2	
		6	Certification text (see instructions for verbatim text)				67	A67	
Total Record Length							72		
Cover Letter Text (file-specific)	910	1	Record type code				3	I3	
		4	Cover letter text, file-specific (see instructions)				69	A69	
(Optional)	Total Record Length							72	
Cover Letter Text (not specific to file)	920	1	Record type code				3	I3	
		4	Other cover letter text, not file-specific (see instructions)				69	A69	
(Optional)	Total Record Length							72	

<sup>34</sup> The code for this data element is either "CERTIFY," "CERTIFY CONTROLLED," or "CERTIFY DEFERRED."

"CERTIFY" means:

"I understand that EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.1, as required by 40 CFR 75.64.

I certify that all data submitted in this report were recorded in accordance with the applicable requirements of 40 CFR Part 75, and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

"CERTIFY CONTROLLED" means:

"I certify that for all hours in which data are submitted following the provisions of 75.34(a)(a) that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate SO<sub>2</sub> or other emissions, pursuant to § 75.34.

I understand that EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.1, as required by 40 CFR 75.64.

I certify that all data submitted in this report were recorded in accordance with the applicable requirements of 40 CFR Part 75, and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

"CERTIFY DEFERRED" means:

"I understand that for non-operating, affected unit(s) that are not yet certified under 40 CFR 75.4, this electronic report does not have to be generated by a Data Acquisition and Handling System.

I certify that one or more of the affected units identified in this electronic report did not operate and did not generate any SO<sub>2</sub>, NO<sub>x</sub>, or CO<sub>2</sub> emissions during the reporting period specified in the quarterly submission."

**TABLE 7: COMPLIANCE CERTIFICATION DATA**

CERTIFICATION INFORMATION								
RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	PROGRAM	UNITS	RANGE	LENGTH	FORMAT (FTN)
Subpart H Certification Statement and NO <sub>x</sub> Authorized Account Representative Signature  (New)  <b>Subpart H Only</b>	940	1	Record type code				3	I3
		4	Electronic representation of NO <sub>x</sub> Budget Program certification statements <sup>35</sup>				18	A18
		22	AAR last name				25	A25
		47	AAR first name				15	A15
		62	AAR middle initial				2	A2
		64	Date of signature				6	I6
		70	Title (AAR or AAAR)				4	A4
		Total Record Length						
Subpart H General Certification Statement  (New)	941	1	Record type code				3	I3
		4	Certification statement line #			1-11	2	I2
		6	Certification text (ask State for verbatim text)				67	A67
Total Record Length							72	
<b>(Subpart H Only)</b>  Contact Person Record  (Optional)  (New)	999	1	Record type code				3	I3
		4	First name				10	A10
		14	Last name				15	A15
		29	Role/Position of contact person				20	A20
		49	Company				20	A20
		69	DR indicator flag (D-DR/ADR/AAR/AAAR, N-Other)			D,N	1	A1
		70	Phone #				10	I10
		80	Fax #				10	I10
		90	E-mail address				75	A75
Total Record Length							164	

<sup>35</sup> The code for this data element is either "CERTIFY," "CERTIFY CONTROLLED," or "CERTIFY DEFERRED."

Unless otherwise specified by State requirements, "CERTIFY" means:

"I understand that the State or EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.1.

I certify that all data submitted in this report were recorded in accordance with Part 75 and any applicable State requirements and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

Unless otherwise specified by State requirements, "CERTIFY CONTROLLED" means:

"I certify that for all hours in which data are substituted that the add-on emission controls were operating within the range of parameters listed in the monitoring plan and that the substitute values recorded during the quarter do not systematically underestimate emissions.

I understand that the State or EPA may reject any electronic data submission (including Quarterly Reports) if it does not conform to the formatting requirements of EPA's Electronic Data Reporting, Version 2.1.

I certify that all data submitted in this report were recorded in accordance with Part 75 and any applicable State requirements and that all emissions and quality control data are reported using component ID codes, system ID codes, and formula ID codes which represent current operating conditions."

Unless otherwise specified by State requirements, "CERTIFY DEFERRED" means:

"I understand that for non-operating, affected unit(s) that are not yet certified under Part 75 and applicable State regulations, this electronic report does not have to be generated by a Data Acquisition and Handling System.

I certify that one or more of the affected units identified in this electronic report did not operate and did not generate any NO<sub>x</sub> emissions during the reporting period specified in the submission."



**APPENDIX A: OTC NBP ONLY RECORD TYPES (FROM EDR v2.0)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Daily QA Reference Checks for Non-CEMS Parameters	232	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	System parameter			4	A4
		16	Date	YYMMDD		6	I6
		26	Hour	HH	00-23	2	I2
		28	Reference value			13	F13.3
		41	Measured value			13	F13.3
		54	Units of measure			5	A5
		59	Level (L-low, M-mid, N-normal, H-high)		L,M,N,H	1	A1
		60	Results (CE)	%	0.0-100.0	5	F5.1
		65	Status (P-pass, F-fail)		P,F	1	A1
Total Record Length						65	
Other Daily QA Checks	233	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Date	YYMMDD		6	I6
		22	Hour	HH	00-23	2	I2
		24	Status (P-pass, F-fail)		P,F	1	A1
Total Record Length						24	
Long Term Fuel Flow Measurements	306	1	Record type code			3	I3
		4	Unit/Pipe ID			6	A6
		10	Monitoring system ID			3	A3
		13	Type of fuel			3	A3
		16	Period begin date	YYYYMMDD		8	I8
		24	Period begin hour	HH	00-23	2	I2
		26	Period end date	YYYYMMDD		8	I8
		34	Period end hour	HH	00-23	2	I2
		36	Quantity of fuel			10	I10
		46	Units of measure			5	A5
		51	Operating hours in period	hr		4	I4
		55	Measurement method code			3	A3
Total Record Length						57	
Hourly Heat Input Data for Alternative Heat Input Methods	350	1	Record type code			3	I3
		4	Unit/Stack/Pipe ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Date	YYMMDD		6	I6
		22	Hour	HH	00-23	2	I2
		24	Percent availability for heat input calculations	%	0.0-100.0	5	F5.1
		29	Hourly heat input rate	mmBtu/hr		7	F7.1
		36	Adjusted hourly heat input rate	mmBtu/hr		7	F7.1
		43	Method of determination code		05-12,30,54,55	2	I2
Total Record Length						44	

**APPENDIX A: OTC NBP ONLY RECORD TYPES (FROM EDR v2.0) (cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Supplementary Heat Input Data for Solid Fuel Measurements	351	1	Record type code			3	I3
		4	Unit ID			6	A6
		10	Monitoring system ID			3	A3
		13	Date	YYMMDD		6	I6
		19	Hour	HH	00-23	2	I2
		21	Gross calorific value (GCV)	Btu/lb		10	F10.1
		31	Mass of fuel burned during the hour	lb		10	F10.1
		41	Hourly fuel feed rate	lb/hr		10	F10.1
		51	Fuel usage time		0.01-1.00	4	F4.2
Total Record Length						54	
Supplementary Heat Input Data for Other Methodologies	352	1	Record type code			3	I3
		4	Unit/Stack/Pipe ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Date	YYMMDD		6	I6
		22	Hour	HH	00-23	2	I2
		24	Parameter (use code approved by State)			4	A4
		28	Operator (LT-less than, GT-greater than, LE-less than or equal to, GE-greater than or equal to, EQ-equal to)		LT,GT,LE,GE,EQ	3	A3
		31	Limit			13	F13.3
		44	Units (use code approved by State)			5	A5
		49	Hourly value			13	F13.3
		62	Parameter status flag (Y-in spec, N-out of spec, X-parameter data missing or invalid)		Y,N,X	1	A1
Total Record Length						62	
Monitoring System Recertification Events	555	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Monitoring system ID/Component ID			3	A3
		13	Begin date of recertification event	YYMMDD		6	I6
		19	Begin hour of recertification event	HH	00-23	2	I2
		21	Recertification event code			2	I2
		23	Recertification event description			50	A50
		73	Recertification event response/action taken			50	A50
		123	Reserved			3	A3
		126	7-day calibration test required	7CE		3	A3
		129	Linearity check required	LIN		3	A3
		132	Cycle time test required	CTT		3	A3
		135	RATA/bias test required (RAN: normal load only, RA3: 3-load RATA)	RAN,RA3		3	A3
		138	DAHS verification required	VER		3	A3
		141	Daily calibration	DLC		3	A3
		144	Interference check	INT		3	A3
		147	Leak check	LCK		3	A3
		150	Completion date of required recertification tests	YYMMDD		6	I6
		156	Completion hour of required recertification tests	HH	00-23	2	I2
Total Record Length						157	

**APPENDIX A: OTC NBP ONLY RECORD TYPES (FROM EDR v2.0) (cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Fuel Flowmeter Calibration Data	625	1	Record type code	YYMMDD		3	I3
		4	Unit/Pipe ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Date			6	I6
		22	Test number			2	I2
		24	Reference flow measurement value			10	F10.1
		34	Measured flow value			10	F10.1
		44	Units of measure for URV and flow rate			5	A5
		49	Fuel flow rate level (L-low, M-mid, H-high)	L,M,H	1	A1	
Total Record Length						49	
Fuel Flowmeter Calibration Results	626	1	Record type code	YYMMDD		3	I3
		4	Unit/Pipe ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Date			6	I6
		22	Test number			2	I2
		24	Component upper range value			10	F10.1
		34	Mean of reference flow values			10	F10.1
		44	Mean of measured flow values			10	F10.1
		54	Units of measure for URV and flow rate	5	A5		
		59	Accuracy results (% of URV)	%	0.0-100.0	5	F5.1
		64	Fuel flow rate level (L-low, M-mid, H-high)	L,M,H	1	A1	
Total Record Length						64	
Identical Unit Group Test Results for Appendix E	661	1	Record type code	YYYYMMDD	1-99	3	I3
		4	Group ID			8	A8
		12	Test completion date			8	I8
		20	Operating level (1-lowest)	2		I2	
		22	Average emission rate for all tests at this level	lb/mmBtu		6	F6.3
		28	Average heat input rate for all tests at this level	mmBtu/hr		7	F7.1
Total Record Length						34	
NO <sub>x</sub> Budget Program Certification Statement and Authorized Account Representative Signature	930	1	Record type code			3	I3
		4	Electronic representation of NO <sub>x</sub> Budget Program certification statements			18	A18
		22	AAR last name			25	A25
		47	AAR first name			15	A15
		62	AAR middle initial			2	A2
		64	Date of signature			6	I6
		70	Title (AAR or AAAR)			4	A4
Total Record Length						73	
NO <sub>x</sub> Budget Program General Certification Statement	931	1	Record type code		1-11	3	I3
		4	Certification statement line #			2	I2
		6	Certification text			67	A67
Total Record Length						72	

### APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Oil  (Effective through December 31, 1995)	311	1	Record type code			3	I3
		4	Unit ID/Pipe header ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Hour	HH	00-23	2	I2
		18	Average flow rate of oil for the hour			10	F10.1
		28	Sulfur content of oil sample	%	0.0-7.0	5	F5.1
		33	Code for method of oil sampling from monitoring plan	ADC,ADD,ADR		3	A3
		36	Mass rate of oil combusted for the hour	lb/hr		10	F10.1
		46	Average SO <sub>2</sub> mass emissions for the hour	lb/hr		7	F7.1
		53	Highest sulfur content recorded from last 30 daily oil samples	%	0.0-7.0	5	F5.1
		58	Missing data flag	0,1		1	I1
Total Record Length						58	
SO <sub>2</sub> Mass Emissions Alternative Estimation Parameters for Natural Gas  (Effective through December 31, 1995)	312	1	Record type code			3	I3
		4	Unit ID/Pipe header ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Heat input from natural gas	mmBtu		10	F10.1
		26	Sulfur content of daily gas sample	grains/scf		8	F8.1
		34	Volume of gas combusted per day	kscf		8	F8.1
		42	SO <sub>2</sub> emission rate from NADB or NADB default for pipeline natural gas	lb/mmBtu		13	F13.5
		55	Missing data flag	0,1		1	I1
Total Record Length						55	
NO <sub>x</sub> Emission Rate Alternative Estimation Parameters for Oil  (Effective through December 31, 1995)	321	1	Record type code			3	I3
		4	Unit ID/Pipe header ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Hour	HH	00-23	2	I2
		18	Fuel flowrate of oil for the hour	gal/hr		10	F10.1
		28	NO <sub>x</sub> emission rate F-factor for oil			10	F10.1
		38	Average NO <sub>x</sub> emission rate for the hour	lb/mmBtu/hr		6	F6.3
		44	Missing data flag	0,1		1	I1
Total Record Length						44	
NO <sub>x</sub> Emission Rate Alternative Estimation Parameters for Natural Gas  (Effective through December 31, 1995)	322	1	Record type code			3	I3
		4	Unit ID/Pipe header ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Hour	HH	00-23	2	I2
		18	Fuel flowrate of natural gas for the hour	Mscf/hr		10	F10.1
		28	NO <sub>x</sub> emission rate F-factor for natural gas			10	F10.1
		38	Average NO <sub>x</sub> emission rate for the hour	lb/mmBtu/hr		6	F6.3
		44	Missing data flag	0,1		1	I1
Total Record Length						44	

**APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)**  
**(cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
SO <sub>2</sub> Control Equipment Operation Parameters	400	1	Record type code			3	I3
		4	Unit ID/Stack ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Hour	HH	00-23	2	I2
		18	Number of scrubber modules operating		≥1	2	I2
Total Record Length						19	
SO <sub>2</sub> Control Equipment Scrubber Module Parameters	401	1	Record type code			3	I3
		4	Unit ID/Stack ID			6	A6
		10	Scrubber module number		1-n <sup>36</sup>	2	I2
		12	Date	YYMMDD		6	I6
		18	Hour	HH	00-23	2	I2
		20	Average percent solids in slurry for operating scrubber module	%	0.0-100.0	5	F5.1
		25	Average feedrate of makeup slurry to operating scrubber module	gal/hr		10	F10.2
		35	Average pressure differential across operating scrubber module			10	F10.2
		45	Average inline absorber pH		0.0-14.0	4	F4.1
		49	Number of spray levels in service		≥1	2	I2
		51	Average scrubber module inlet temperature	°F		3	I3
		54	Average scrubber module outlet temperature	°F		3	I3
Total Record Length						56	
NO <sub>x</sub> Control Equipment Operation Parameters	410	1	Record type code			3	I3
		4	Unit ID/Stack ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Hour	HH	00-23	2	I2
		18	Inlet air flow rate			6	I6
		24	Excess O <sub>2</sub> concentration of flue gas at stack outlet	%	0.0-100.0	5	F5.1
		29	CO concentration of flue gas at stack outlet	ppm		5	F5.1
		34	Flue gas temperature at furnace exit outlet duct	°F		3	I3
Total Record Length						36	

<sup>36</sup> Upper limit equals the number of scrubber modules identified for the corresponding piece of control equipment.

**APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)****(cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
SO <sub>2</sub> Phase I Technology Post-Combustion Control Parameters  Inlet Monitors  (Phase I control units through 12/31/99)	420	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Monitoring system ID			3	A3
		13	Date	YYMMDD		6	I6
		19	Hour	HH		2	I2
		21	Inlet SO <sub>2</sub> emission rate for the hour	lb/mmBtu	00-23	13	F13.3
		34	Reserved			13	
		47	Formula ID from monitoring plan for hourly inlet SO <sub>2</sub> emission rates			3	A3
		50	Method of determination code		01-04,14	2	I2
Total Record Length						51	
SO <sub>2</sub> Phase I Technology Post-Combustion Control Parameters  Outlet Monitors  (Phase I Control Units through 12/31/99)	421	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Monitoring system ID			3	A3
		13	Date	YYMMDD		6	I6
		19	Hour	HH	00-23	2	I2
		21	Outlet SO <sub>2</sub> emission rate for the hour	lb/mmBtu		13	F13.3
		34	Reserved			13	
		47	Formula ID from monitoring plan identifying formula deriving average hourly outlet SO <sub>2</sub> emission rates from monitor data			3	A3
		50	Method of determination code		01-04,14	2	I2
Total Record Length						51	
SO <sub>2</sub> Phase I Technology Pre-Combustion Control Parameters  (Phase I Control Units through 12/31/99)	422	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Date	YYMMDD		6	I6
		16	Hour	HH	00-23	2	I2
		18	Pre-treatment fuel weight	ton		10	F10.1
		28	Pre-treatment fuel sulfur content	%	0.0-100.0	5	F5.1
		33	Pre-treatment fuel gross calorific value	Btu/lb		10	F10.1
		43	Post-treatment fuel weight	ton		10	F10.1
		53	Post-treatment fuel sulfur content	%	0.0-100.0	5	F5.1
		58	Post-treatment fuel gross calorific value	Btu/lb		10	F10.1
Total Record Length						67	
SO <sub>2</sub> Phase I Technology Combustion Emission Controls  (Phase I Control Units through 12/31/99)	423	1	Record type code			3	I3
		4	Unit/Stack ID			6	A6
		10	Monitoring system ID			3	A3
		13	Date	YYMMDD		6	I6
		19	Hour	HH	00-23	2	I2
		21	Outlet SO <sub>2</sub> emission rate for the hour	lb/mmBtu		13	F13.3
		34	Daily inlet SO <sub>2</sub> emission rate (determined by coal sampling and analysis)	lb/mmBtu		13	F13.3
Total Record Length						46	

**APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)**  
**(cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Unit Definition Table  (Effective through December 31, 1995)	500	1	Record type code			3	I3
		4	Plant name			20	A20
		24	Unit short name			20	A20
		44	Unit ID ( <u>i.e.</u> , NADB boiler ID)			6	A6
		50	Unit classification			2	A2
		52	Boiler type			3	A3
		55	Primary fuel			3	A3
		58	SO <sub>2</sub> controls			3	A3
		61	NO <sub>x</sub> controls			8	A8
		69	Particulate controls			6	A6
		75	SO <sub>2</sub> monitoring method			3	A3
		78	NO <sub>x</sub> monitoring method			8	A8
		86	CO <sub>2</sub> monitoring method			6	A6
		92	Opacity monitoring method			3	A3
Total Record Length						94	
Stack/Pipe Header Definition Table  (Effective through December 31, 1995)	501	1	Record type code			3	I3
		4	Stack/Pipe header ID			6	A6
		10	Stack/Pipe header description or name			20	A20
		30	Unit ID			6	A6
		36	Submission status - Add (A), Delete (D), Correct (C), Unchanged (U)	A,C,D,U		1	A1
Total Record Length						36	
Unit Definition Table  (Revised RT 500)  Required January 1, 1996  (Effective through December 31, 1999)	502	1	Record type code			3	I3
		4	Plant name			20	A20
		24	Unit short name			20	A20
		44	Unit ID ( <u>i.e.</u> , NADB boiler ID)			6	A6
		50	Unit classification			2	A2
		52	Boiler type			3	A3
		55	Primary fuel			3	A3
		58	SO <sub>2</sub> controls			3	A3
		61	NO <sub>x</sub> controls			8	A8
		69	Particulate controls			6	A6
		75	SO <sub>2</sub> monitoring method			3	A3
		78	NO <sub>x</sub> monitoring method			8	A8
		86	CO <sub>2</sub> monitoring method			6	A6
		92	Opacity monitoring method			3	A3
		95	Secondary fuels			13	A13
		108	Maximum hourly gross load in megawatts (used for load range calculations)	MWe-hr		6	I6
		114	Maximum hourly gross steam load (used for load range calculations)	1000 lbs/hr		6	I6
		120	Unit definition change date	YYMMDD		6	I6
Total Record Length						125	
Monitoring System Certification Status/Events  (Withdrawn 8/97)	511	1	Record type code			3	I3
		4	Unit/Stack/Pipe ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Certification status/event code (PVC-provisional certification, RET-system retired)		PVC,RET	3	A3
		19	Status/event date	YYYYMMDD		8	I8
		27	Status/event hour	HH	00-23	2	I2
Total Record Length						28	

**APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)**  
**(cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Reference Method Supporting Data for Gas RATAs  (Required January 1, 1998) (Withdrawn 1997)	612	1	Record type code			3	I3
		4	Unit ID/Stack ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Run number			2	I2
		18	RM run start date	YYMMDD		6	I6
		24	RM run start time	HHMM	0000-2359	4	I4
		28	RM run end date	YYMMDD		6	I6
		34	RM run end time	HHMM	0000-2359	4	I4
		38	Type of RM analyzer/system	EXT, DIL		3	A3
		41	Moisture basis of RM analysis	WET, DRY		3	A3
		44	RM instrument span (as defined in App A, Part 60)			5	I5
		49	RM dilution factor			5	I5
		54	Reference zero gas concentration			7	F7.2
		61	Initial (pre-test) calibration response--zero gas			7	F7.2
		68	Pre-test calibration error--zero gas (% of span)	%		5	F5.1
		73	Reference mid-level gas concentration			7	F7.2
		80	Initial (pre-test) calibration response--mid gas			7	F7.2
		87	Pre-test calibration error--mid gas (% of span)	%		5	F5.1
		92	Reference high-level gas concentration			7	F7.2
		99	Initial (pre-test) calibration response--high gas			7	F7.2
		106	Pre-test calibration error--high gas (% of span)	%		5	F5.1
		111	Upscale gas used during run (mid, high)	M,H		1	A1
		112	Pre-run system response--zero gas			7	F7.2
		119	Pre-run system bias (non-dilution) or calibration error (dilution)--zero gas (% of span)	%		5	F5.1
		124	Post-run system response--zero gas			7	F7.2
		131	Post-run system bias (non-dilution) or calibration error (dilution)--zero gas (% of span)	%		5	F5.1
		136	Pre-run system response--upscale gas			7	F7.2
		143	Pre-run system bias (non-dilution) or calibration error (dilution)--upscale gas (% of span)	%		5	F5.1
		148	Post-run system response--upscale gas			7	F7.2
		155	Post-run system bias (non-dilution) or calibration error (dilution)--upscale gas (% of span)	%		5	F5.1
		160	Zero drift (% of span)	%		5	F5.1
		165	Calibration drift (% of span)	%		5	F5.1
		170	Unadjusted (raw) average concentration for run			7	F7.1
		177	% moisture in stack gas	% H <sub>2</sub> O		5	F5.2
		182	Stack gas density adjustment factor			5	F5.1
		187	Adjusted average concentration for run (corrected for calibration bias/error and, if applicable, moisture and stack, gas density)			7	F7.1
		194	F-factor used for conversion to lb/mmBtu			6	I6
		200	Formula code for formula used to convert to lb/mmBtu			5	A5
		Total Record Length					



**APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)****(cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Reference Method 2 Supporting Data for Flow RATA Tests  (Required January 1, 1998) (Withdrawn 1997)	613	1	Record Type			3	I3
		4	Unit ID/Stack ID			6	A6
		10	Monitoring system ID			3	A3
		13	Run start date	YYMMDD		6	I6
		19	Run start time	HHMM	0000-2359	4	I4
		23	Run end date	YYMMDD		6	I6
		29	Run end time	HHMM	0000-2359	4	I4
		33	Run number			2	I2
		35	Operating level	L,M,H,N		1	A1
		36	Number of traverse points			2	I2
		38	(Square root of ΔP) <sub>avg.</sub>	in. H <sub>2</sub> O		5	F5.2
		43	T <sub>s</sub> , stack temperature	°R		4	I4
		47	P <sub>bar</sub> , barometric pressure, in. Hg	in. Hg		5	F5.2
		52	P <sub>g</sub> , stack static pressure, in. H <sub>2</sub> O	in. H <sub>2</sub> O		5	F5.2
		57	% CO <sub>2</sub> in stack gas, dry basis	%		5	F5.2
		62	% O <sub>2</sub> in stack gas, dry basis	%		5	F5.2
		67	% moisture in stack gas	% H <sub>2</sub> O		5	F5.2
		72	M <sub>d</sub> , stack gas molecular weight, dry basis	lbs/lbs-mole		5	F5.2
		77	M <sub>s</sub> , stack gas molecular weight, wet basis	lbs/lbs-mole		5	F5.2
		82	C <sub>p</sub> , pitot tube coefficient			5	F5.3
		87	Date of latest pitot tube calibration	YYMMDD		6	I6
		93	A <sub>s</sub> , stack or duct cross-sectional area at test port	ft <sup>2</sup>		6	F6.1
		Total Record Length					
Cycle Time/Response Time Test Data and Results  (Effective through December 31, 1995)	620	1	Record type code			3	I3
		4	Unit ID/Stack ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Date	YYMMDD		6	I6
		22	Start time	HHMM	0000-2359	4	I4
		26	End time	HHMM	0000-2359	4	I4
		30	Response/cycle time	Min		2	I2
		32	Start monitor value			13	F13.3
		45	Reference value			13	F13.3
		58	Monitor value at which 95% of the reference value change has occurred			13	F13.3
Total Record Length						70	
Alternative Monitoring System Approval Petition Data  (Renumbered as 640, July 3, 1997)	630	1	Record type code			3	I3
		4	Unit ID/ Stack ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	AMS ID			6	A6
		22	Date	YYMMDD		6	I6
		28	Hour	HH	00-23	2	I2
		30	Hourly test data for alternative monitoring system			13	F13.3
		43	Hourly lognormalized test data for alternative monitoring system			13	F13.3
		56	Hourly test data for reference CEMS			13	F13.3
		69	Fuel type code			2	I2
		71	Operating level - Low, Normal, High (L,N,H)	L,N,H		1	A1
		72	Gross unit load	MWge		6	I6
Total Record Length						77	

**APPENDIX B: RETIRED/RENUMBERED RECORD TYPES (FROM EDR v1.3)**  
**(cont.)**

RECORD TYPE	TYPE CODE	START COL	DATA ELEMENT DESCRIPTION	UNITS	RANGE	LENGTH	FORMAT (FTN)
Alternative Monitoring System Approval Petition Results and Statistics  (Renumbered as 641, July 3, 1997)	631	1	Record type code	1,2,3,4		3	I3
		4	Unit ID/Stack ID			6	A6
		10	Component ID			3	A3
		13	Monitoring system ID			3	A3
		16	Unit of measure (1=ppm, 2=lb/mmBtu, 3=scfh, 4=%)			1	A1
		17	Arithmetic mean of AMS values			13	F13.3
		30	Arithmetic mean of CEM values			13	F13.3
		43	Arithmetic mean of differences of paired AMS and CEM values			13	F13.3
		56	Variance of differences			13	F13.3
		69	Variance of measured values of AMS			13	F13.3
		82	Variance of measured values for CEM			13	F13.3
		95	F-statistic			13	F13.3
		108	Critical value of F at 95% confidence level for sample size			13	F13.3
		121	Coefficient of correlation (Pearson's r) of CEM and AMS data			13	F13.3
		134	Shapiro-Wilk test statistic (W) for AMS data			13	F13.3
		147	Shapiro-Wilk test statistic (W) for CEMS data			13	F13.3
		160	Lognormally adjusted data used in final analysis (1=yes, 0=no)	0,1	1	I1	
		161	Autocorrelation coefficient (ρ) for AMS data		13	F13.3	
		174	Autocorrelation coefficient (ρ) for CEM data		13	F13.3	
		187	Autocorrelation coefficient (ρ) for differences of paired AMS and CEM data		13	F13.3	
		200	Adjustment for autocorrelation used in final analysis (1=yes, 0=no)	0,1	1	I1	
		201	Covariance of alternative monitoring data and associated lag(1) values		13	F13.3	
		214	Covariance of continuous emission monitoring data and associated lag(1) values		13	F13.3	
		227	Covariance of differences of paired AMS and CEM data		13	F13.3	
		240	Standard deviation of AMS data		13	F13.3	
		253	Standard deviation of CEM data		13	F13.3	
		266	Standard deviation of differences of paired AMS and CEM data		13	F13.3	
		279	Standard deviation of lag(1) AMS data		13	F13.3	
		292	Standard deviation of lag(1) CEM data		13	F13.3	
		305	Standard deviation of lag(1) differences of paired AMS and CEM data		13	F13.3	
		318	Variance inflation factor for AMS data		13	F13.3	
		331	Variance inflation factor for CEM data		13	F13.3	
		344	Variance inflation factor for difference of paired AMS and CEM data		13	F13.3	
Total Record Length						356	